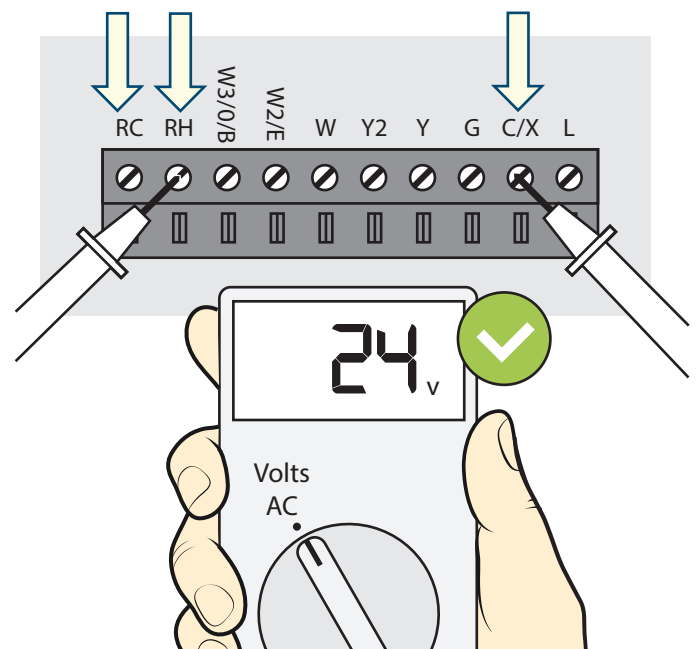
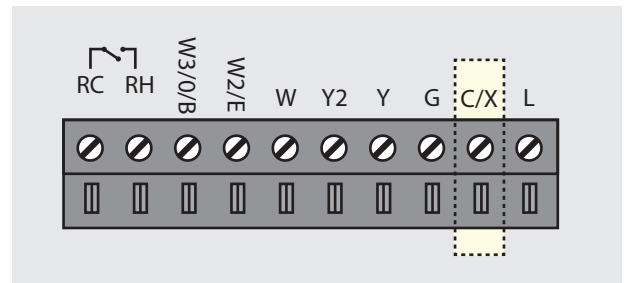
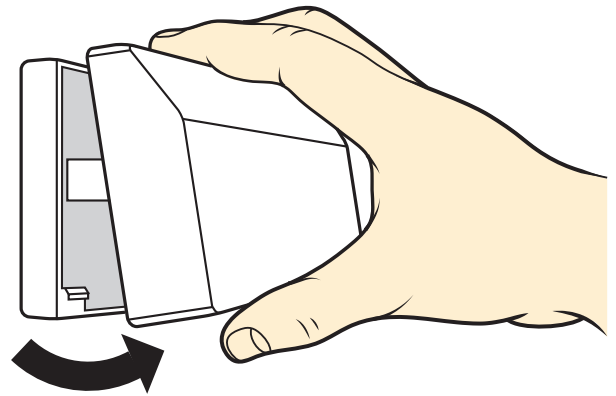


## TESTING AND CONNECTING 24VAC COMMON WIRE

The PowerShift Smart Thermostat requires a 24 Volt AC (24 VAC) Common Wire (C/X Wire) to supply power. If your existing thermostat is not powered by 24 VAC, you may have to connect the Common Wire at the HVAC unit. Follow the instructions below to determine if your home has the required 24 VAC Common Wire.

### Determine if your current system is using 24VAC Common Wire

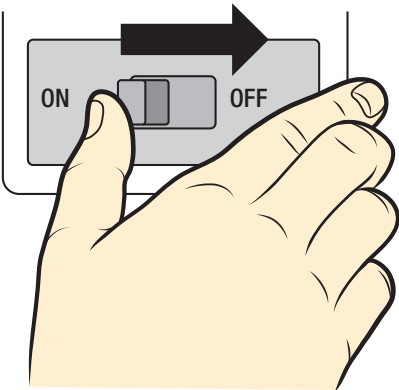
- Remove the existing thermostat cover from the wall plate (refer to your thermostat manual if necessary)
- Visually inspect wire terminals to locate terminals "C or X" and "R," "RH" or "RC"
- Determine if the Common Wire (typically blue wire, but not always) is present and connected to the C/X terminal:
  - If Common Wire is connected to C/X terminal, you likely have 24 VAC power available
  - If your thermostat does not have a Common Wire connected to C/X terminal or if you have unused wires in the thermostat wire bundle, test the voltage to determine if there is 24 VAC power available
- Using a volt meter, touch one voltmeter lead to the metal screw of the C/X terminal and the other lead to R, RH, or RC terminal.
  - Voltage readings of around 24V (between 24-30VAC) means there is power available at the C/X terminal – proceed to Step 1 to remove your old thermostat
  - Voltage readings of 0V (below 18 VAC) means the Common Wire is not connected – visit [nenergy.com/powershift/selfinstallguide](http://nenergy.com/powershift/selfinstallguide) for additional instructions on how to connect the 24VAC Common Wire at the HVAC unit



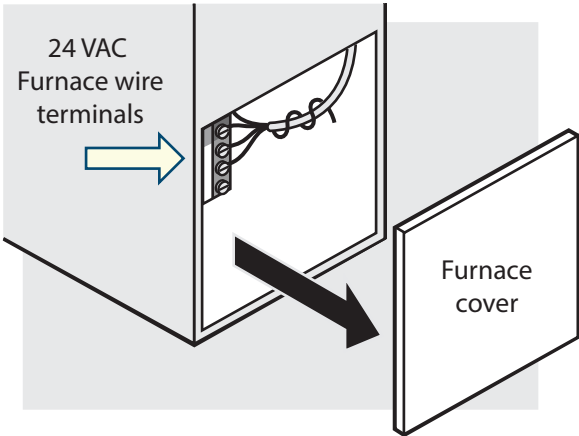
**If you determine that the C Wire is not connected and are not comfortable proceeding, please call 855-676-9373 to schedule a professional installation.**

**Connect 24VAC Common Wire at the HVAC unit**

- Switch OFF electricity to the furnace and air conditioner by turning the breaker labeled “Forced Air Unit” or “FAU” or “AC” or “HVAC” to the OFF position at the breaker panel. If you can not locate the proper breaker, switch OFF the main breaker

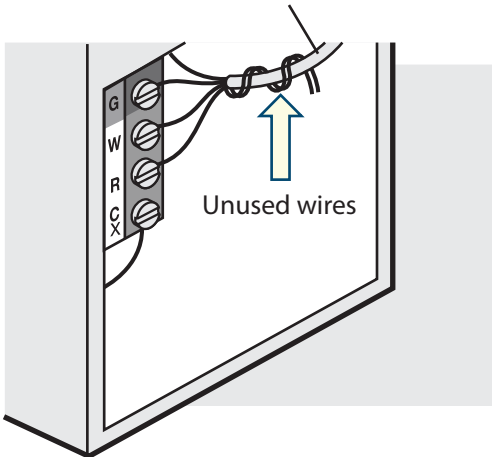


- Go to your HVAC unit and remove cover from the furnace panel

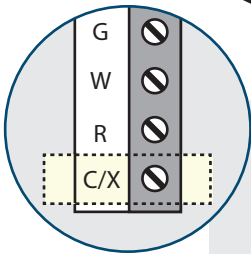


- Locate the terminal labeled “C/X” - this is the 24 VAC Common Wire terminal
- Locate the thermostat wire bundle inside the furnace panel and compare unused wires at the furnace to unused wires at the thermostat

Thermostat wire bundle



- Find a wire that is labeled “C/X” or is unused (if blue wire is available, use that) and connect to the C terminal at the furnace



- Replace furnace panel – Replace furnace panel - ensure furnace panel is properly secured proceed to with thermostat installation instructions
- Turn power back on at the breaker and test for voltage reading around 24VAC
- If 24VAC power is available, proceed to Step 1 in the PowerShift Installation Guide

