

## Pre-Heating Jouley While Charging

While a traditional internal combustion engine (ICE) bus generates large amounts of heat that can be harvested to warm the interior of the bus, an electric bus's climate control system relies on battery power to accomplish this function. In addition, the batteries on electric vehicles operate most efficiently at warmer temperatures and therefore require heating during colder months. The increased energy consumption means that range during colder months will be less than other times of the year with warmer temperatures.



There are a few things electric bus operators can do to optimize range, including pre-heating the passenger compartment while the bus is charging. Here's how to pre-heat your bus while it's charging:

***This process is specifically for 1-to-1 chargers (one PCS & one dispenser). If your charger has multiple dispensers that charge sequentially, then it will only "pre-heat on charge" one bus at a time.***

1. If your Jouley bus is connected to a charge cable, disengage the charge cable.
2. Power the bus on. Allow the high-voltage (HV) system to activate. A green truck light will appear on the instrument cluster once the HV system is active.
3. On the dash heat, turn the temperature control to the hot position and turn the blower on.
4. Turn on the rear passenger heat switch. This will begin heating the passenger cabin.
5. Allow the bus's state-of-charge to drop to 99% or lower. Once the SoC reaches 99% or lower, reengage the charge cable to the bus's charge port to initiate charging.
6. Follow standard protocol to activate charging. You can confirm the bus is charging two ways:
  - The green light at the bus's charger port will slow blink green.
  - The instrument cluster will display a charging message on the screen.
7. Allow the bus to continue to charge until you are ready to begin your route.

You can continue to maintain the cabin heat by adjusting the climate control settings as necessary.

### – REMINDER –

#### Turn the Temperature Control to "Cold" When Heat is Not Needed, Even When Keying Off and Exiting the Bus



Photo 1

When the temperature control is set to the "hot" position, the bus will heat the coolant to prepare for system activation, even if the blower is not turned on (see Photo 1). This enables the system to provide heat much more quickly than a traditional school bus.

When the heating system is not needed, turn the blower to the "0" position and temperature control to the "cold" position to avoid unnecessary battery consumption. This should be done both when the bus is in operation as well as when keying off and exiting the bus.