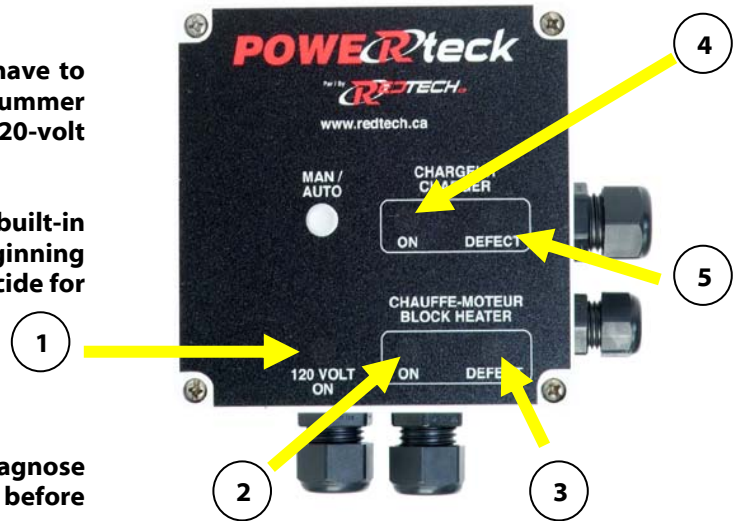


POWERteck is a block heater and charger manager that will activate the block heater or charger only when needed. It is not a block heater nor is it a battery charger; it's only a manager.

You simply install the unit on a vehicle and then you don't have to decide whether the vehicle needs to be plugged-in or not. Summer time or winter time, just hook up the POWERteck unit into a 120-volt outlet and let the system decide what to do.

The system works on 1-hour cycles. It is equipped with a built-in temperature sensor and a block heater time chart. At the beginning of every hour, the unit looks at the outside temperature to decide for how many minutes in the following hour the block heater should be activated. When the block heater activation cycle is completed, the unit will recharge the batteries, only if needed, for the remaining of the hour.

When hooked up into a 120-volt outlet, the system will first diagnose both the block heater and the charger (it takes approx 15 sec.) before entering the AUTOMATIC 1-hour cycle mode described above.



### Control panel :

120 Volts	Block Heater		Charger		
	ON	DEFECT	ON	BLINKING (1)	DEFECT
#1	#2	#3	#4	#4	#5
Green light ON when POWERteck unit is hooked up into a 120-volt outlet	Orange light ON when block heater is activated	Red light ON when block heater is defective	Orange light ON when charger is activated	Blinking light means a possible but not definite problem with the charger	Red light ON when charger is defective

### Light #4 blinking:

- Single blink
  - The batteries voltage is rising slowly but has not reached 13.0 volts yet.
    - Maybe the charger is defective or maybe the current draw on the batteries is too high to compensate the charge.
- Double blink
  - The block heater is activated but the batteries are below 11.8 Volts. It might be time to switch to manual recharge mode
  - Or
  - The batteries voltage is not going up.
    - Maybe the charger is defective or maybe the current draw on the batteries is too high to compensate the charge

### Using the "MAN" function

This function is used to leave the AUTOMATIC mode and access the MANUAL mode or to clear an error warning.

- If the charger in ON and shows a defective signal, pressing the MAN/AUTO function will clear the error warning.
- If the block heater in ON and shows a defective signal, pressing the MAN/AUTO function will clear the error warning.
- Press this function once to select manually either one of the 2 electrical circuits. Once activated, the selected circuit will remain activated for 5 hours before going back to the AUTOMATIC mode.
- To leave the POWERteck unit in manual mode for more than 5 hours, select manually either one of the 2 circuits and keep pressing the function until the orange light starts blinking. The system is now on permanent manual mode and will remain like this until the 120-volt power is taken off.

