



## Compact Adjustable Electric-Fan Controller with Relay Kit

### Installation Instructions

**For Part Numbers  
33094 and 33095**

(An installation video is available at [youtube.com/FlexaliteCooling](http://youtube.com/FlexaliteCooling))

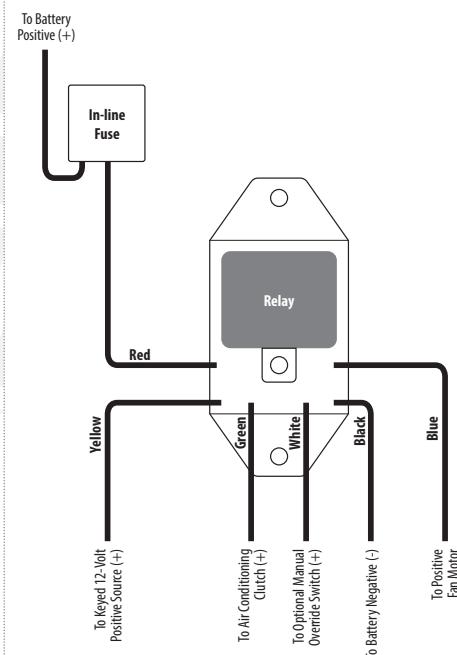
### Important Notes

1. Always disconnect the vehicle battery before adding electric accessories such as this Flex-A-Lite® electric-fan controller. Read all instructions first. Use a test light to verify power sources before disconnecting the battery.
2. Take care that all wire routing is free of moving parts and sources of abrasion that can damage the wires.
3. Cut and remove excess wire during the installation.
4. Do not lengthen wires. Significantly longer wires can increase resistance and lead to problems relating to excessive heat including component damage and possible fire.
5. For all wire connections, strip ½-inch of insulation from wire ends and make firm crimp connections using high-quality electrical tools. It is recommended to cover crimp connections with shrink tubing or electrical tape.

### Wiring Connections

<b>Red</b>	Battery Positive (+)
<b>Black</b>	Battery Negative (-)
<b>Blue</b>	Positive Fan Motor
<b>Yellow</b>	Keyed 12-Volt Positive Source (+)
<b>Green</b>	Air Conditioning Clutch (+)
<b>White</b>	Optional Manual Override Switch (+)

### Wiring Diagram



### 1 Find a Suitable Location for Mounting the Controller

The fan controller should be mounted close enough to the electric fan, the battery and the temperature sensor location for the wires to reach.

Mount it high in the engine bay to keep it away from road debris and excessive water that can splash up as you drive. The controller is water resistant, but not waterproof. Do not mount it in a way that allows water to pool around the terminals.

**It should NOT be mounted to or near extreme heat sources such as the engine exhaust system.**

### 2 Mount the Controller

1. Mark the location of the two mounting holes using the controller as a template. Make sure that you will not be drilling into a critical component, and look behind the surface to ensure that drilling will not damage anything.
2. Drill two holes using an ⅛-inch drill bit.
3. Use the supplied #8 × ½-inch screws to securely mount the controller.

### 3 Make Fan Connections

1. Route the 12-gauge blue controller wire to the positive lead of the electric fan.
2. Use the provided butt connector to connect the controller wire to the fan lead.
3. Make sure that the negative lead of the electric fan is connected to a good chassis ground source with 12-gauge wire.

### 7 Push-In Temperature Probe

PN 33094 uses a push-in temperature probe. Route the probe to the engine side of the radiator. Gently push the probe through the fins in the radiator, as close to the upper radiator hose as possible. The probe should be inserted until only approximately ¼ inch of metal probe is left out of the fins.

### 8 Thread-In Temperature Probe

PN 33095 uses a thread-in temperature probe. Find a suitable port in the engine water-coolant passages. Possible locations include a cylinder head, intake manifold and thermostat housing. You may need to use one or both of the threaded brass bushings to match the size of the probe to the port in the engine. Use Teflon tape or liquid pipe-thread sealant on the threads of each bushing and the probe. Do not over-tighten. It is okay for the two wires leading to the temperature probe to twist as you insert and tighten the probe, however, ensure that there is not excessive tension on the wires where they attach to the probe or the controller. **Do NOT lengthen or shorten the wires that connect the temperature probe.**

### 4 Keyed 12-Volt Source

1. Locate a 12-volt positive power source in the fuse box such as a radio or accessory fuse. This wire may need to be extended to inside the cab of the vehicle if an appropriate keyed 12-volt source is not available in the underhood fuse box. Use a test light to verify that this circuit is only powered when the ignition switch is in the "on" position. **Do NOT connect directly to the ignition switch, ignition coil, ECM, fuel system circuits or safety system circuits.**
2. Use the provided fuse tap to connect the yellow controller wire to the fuse.

### 5 Air Conditioning Connection

1. If the vehicle has air conditioning, connect the green controller wire to the positive A/C clutch lead. Using a test light, verify that the vehicle wire leading to the A/C clutch is positive (some vehicles use a ground circuit to activate the clutch).
2. Use the provided wire tap to connect the green controller wire to the A/C clutch activation wire.

### 6 Optional Manual Override Switch

1. You may connect a toggle switch (such as Flex-A-Lite® part number 31148) to manually turn on the electric fan when desired. Note that a switch is not included.
2. Connect the white controller wire to one pole of a toggle switch. Connect the other pole on the switch to a keyed 12-volt source.

### 9 Battery Connections

1. Route and connect the 12-gauge red and black controller wires to the battery. Cut wires to length and use the provided ring connectors to attach the red controller wire to the positive (+) battery terminal and the black controller wire to the negative (-) battery terminal.
2. Find a suitable location to secure the fuse holder. Drill an ⅛-inch hole and use the provided #8 × ½-inch screw.
3. Reconnect the vehicle battery after this step is complete.

### 10 Setting Fan-Activation Temperature

1. Rotate the pot screw located on the controller clockwise until it stops. **Do NOT force the screw – this will damage the controller.**
2. Make sure tools have been cleared from the engine bay. Start the engine.
3. When the engine reaches the temperature you want the fan to activate, rotate the pot screw counter-clockwise until the fan turns on.



**800-851-1510 ■ [www.Flex-A-Lite.com](http://www.Flex-A-Lite.com)**

### The Flex-A-Lite® Limited Warranty

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