



# Installation and Wiring Variable Speed Control Kit #31165

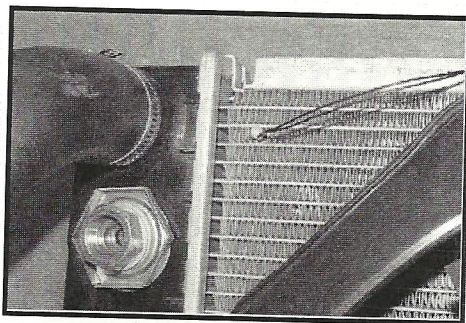
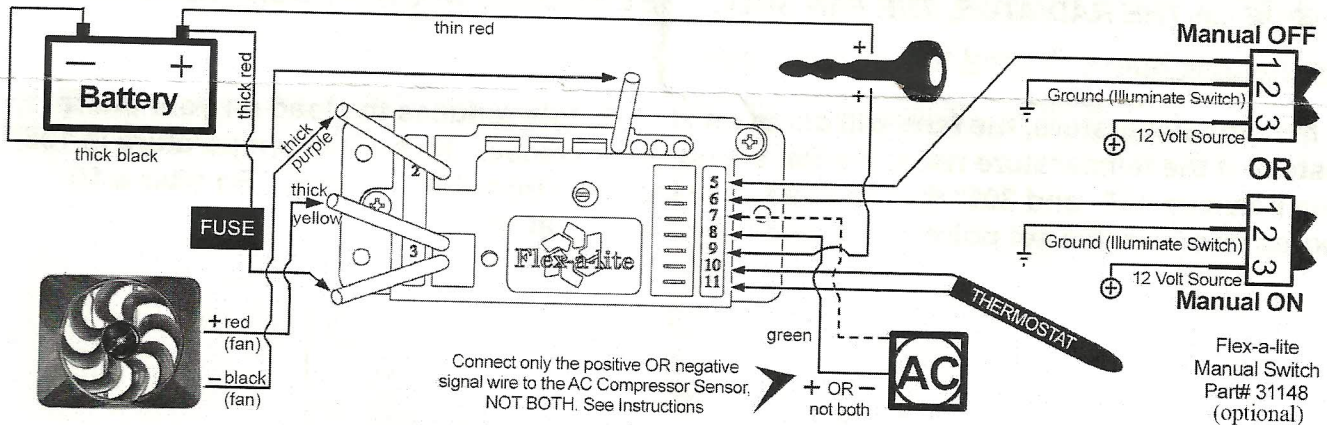
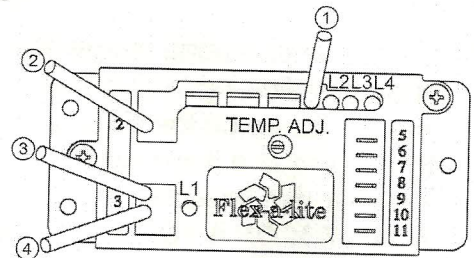


FOLLOW THESE INSTRUCTIONS CAREFULLY TO AVOID DAMAGING THE CONTROL UNIT, FAN MOTORS, AND YOUR VEHICLE! WHEN CRIMPING WIRES, *ALWAYS* USE A QUALITY CRIMPING TOOL (DO NOT USE PLIERS OR OTHER DEVICES).

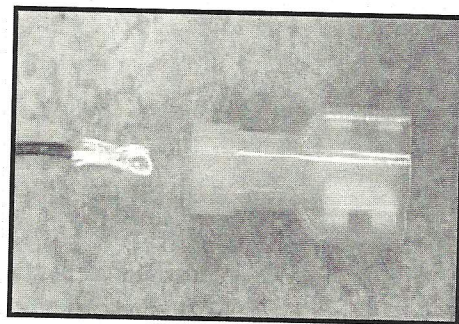
## WIRING CONNECTIONS

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| #1 Battery Negative* (BLACK)      | #8 A/C Compressor Positive Signal |
| #2 Negative to Fan* (PURPLE)      | #9 Ignition Positive Signal*      |
| #3 Positive to Fan* (YELLOW)      | #10 Temp Sensor Wire*             |
| #4 Battery Positive* (RED)        | #11 Temp Sensor Wire*             |
| #5 Negative Override Signal OFF   | L1 Fan Output Indicator           |
| #6 Negative Override Signal ON    | L2 Override Condition Indicator   |
| #7 A/C Compressor Negative Signal | L3 A/C Signal Indicator           |
|                                   | L4 Ignition Signal Indicator      |

\* mandatory connections



Install the temp. probe near the inlet hose, leaving 1/4" of the probe protruding from the core.



When crimping the temp. probe wires, strip back the insulation, then fold wire back on itself to double thickness

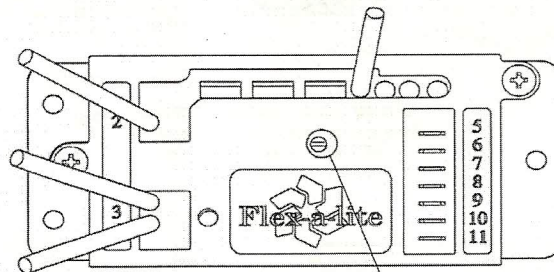


## Initial Start-up and Adjustment Procedure

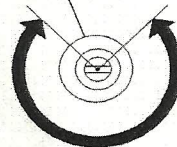
1. Turn ignition on. After 6 seconds, LED #L4 should light up. If not, check to make sure that there is 12 Volts at terminal #9 on VSC. The delay is to allow starter to start the vehicle without the fans drawing any power.
2. With your engine running, engage the A/C. The fans should come on and cycle with the A/C clutch. LED's #L1, L3 and L4 should be lit when fans are running. If they do not turn on, verify that the A/C clutch is engaged and make sure you have a positive signal when the clutch is engaged at terminal #8 (OR negative signal at terminal on #7 if A/C compressor is triggered by a negative signal) on the VSC. Shut off A/C and let engine continue to idle, or drive the vehicle a short distance to bring the engine to operating temperature (monitor the vehicle's temperature gauge).
3. Verify that operating temperature has been reached by feeling the upper radiator hose. Hot water should be flowing through hose into the radiator. If the fans have not cycled on yet, slowly adjust the screw on the VSC until the fans cycle on. Turning the screw counterclockwise will keep the engine at a lower temperature, and turning in the opposite direction will keep the engine at a higher temperature. **NOTE: THE TOTAL MOVEMENT OF THE ADJUSTMENT SCREW IS ABOUT  $\frac{3}{4}$  OF A TURN. TURNING THE SCREW BEYOND THE LIMITS WILL DAMAGE THE UNIT!** Once desired temperature is set, let the engine continue to idle and make sure the fans will cycle to maintain desired temperature. When fans are running, LED's #L1 and L4 should be lit. **VERIFY THE DIRECTION OF BLADE ROTATION. IF THE FAN IS MOUNTED TO THE ENGINE SIDE OF THE RADIATOR, THE FAN SHOULD BE PULLING AIR THROUGH THE RADIATOR.**

### The Variable Speed Control has new features!

At the set temperature, the fans will come on at 60%; this reduces the load on your charging system. If the temperature rises, the fan speed will increase. If your set temperature is 195°F, then between 195° and 205° the fan speed will increase from 60% to 100%. So after a 10-degree rise from the set point, the fans will be running at 100%.



**NOTE:** Maximum rotation of adjusting screw is  $\frac{3}{4}$  turn!



Turning screw counterclockwise = cooler temp.  
Turning screw clockwise = warmer temp.

#### **The Flex-a-lite Limited Warranty**

Flex-a-lite Consolidated, 7213-45th St. Ct. E., Fife, WA 98424, Telephone No. 253-922-2700, warrants to the original purchasing user, that all Flex-a-lite products to be free of defects in material and workmanship for a period of 365 days (1 year) from date of purchase. Flex-a-lite products failing within 365 days (1 year) from date of purchase may be returned to the factory through the point of purchase, transportation charges prepaid. If, on inspection, cause of failure is determined to be defective material or workmanship and not by misuse, accidental or improper installation, Flex-a-lite will replace the product free of charge, transportation prepaid. **Flex-a-lite will not be liable for incidental, progressive or consequential damages.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state to state. The Flex-a-lite warranty is in compliance with the Magnuson-Moss Warranty Act of 1975.