

## **TECH TIP**

### **ADD-ON ELECTRIC FAN INSTALLATION WARNING!**

**There have been several problems created by the installation of add-on radiator/condenser electric fans. In most cases, the installer has wired directly into a computer input circuit; such as a pressure cycling switch or pressure transducer.**

**While this may allow for simple installation, vehicles equipped with sensitive Automatic Temperature Control (ATC) and Powertrain Control Module (PCM) components may be damaged by this procedure.**

**Some symptoms of incorrect installations are:**

**The lights on the ATC control head may flash erratically, after the ignition switch has been cycled off.**

**The ATC controller may no longer function, after ignition switch has been turned on.**

**False trouble codes may be stored in the programmer or PCM.**

**The AC compressor has an erratic operation.**

**These problems can be caused when the electric fan is at operating speed and the ignition is turned off. The fan will continue to free spin, producing its own voltage. The voltage may range from 3 to 8 volts and can feedback through computerized circuits for up to 5 seconds. Feedback into the ATC or PCM can possibly cause damage to sensitive components, or give the programmer incorrect data leading to improper AC operation. On early model vehicles, the pressure cycling switch is wired in series to the compressor clutch. However, many late model vehicles use the pressure cycling switch as a computer input only. In some cases, this input is a ground circuit and not a voltage circuit.**

**Use caution when installing add-on electric fans. Make sure you have a proper wiring diagram of the vehicle, and always make certain that you are not splicing into any computer-related circuits. Always refer to the installation instructions supplied with the add-on electric fan.**