

**Wheels:** *Don F. writes by e-mail: "I have a 1989 Ford E-150 Club Wagon, 302 EFI engine, 165,000 miles. Like its owner, this van is getting a little long in the tooth, but it's a great truck with a great engine and I want to keep it going. It starts fine but then won't idle down. I replaced the idle air control valve but no luck. I am more than a little concerned that mice might have damaged the wiring. I tried physically inspecting the wiring from the IAC valve but that's a difficult job on a van unless you're a contortionist with the eyes of a 19-year old. Any suggestions would be greatly appreciated."*

**Halderman:** The idle air control is commanded by the vehicle computer to provide the idle speed. Some possible causes include:

1. A defective alternator that is producing too much AC voltage usually due to defective diodes.
2. The computer is commanding the high idle speed because it "thinks" that the coolant temperature is low maybe due to a defective engine coolant temperature (ECT) sensor.
3. Mechanical binding of the throttle linkage.

As you can see, there are many possible reasons and that is why I think you should take the van to a professional technician who can diagnosis the root cause. While this diagnosis will cost money, this will prevent you from replacing parts that do not need to be replaced.

There is one thing you can do that might reset the computer so that is can correctly determine the idle speed.

**Step 1-** Disconnect the negative battery cable (not the positive for safety).

**Step 2-** Depress the brake pedal. The brake lights will drain any charges left in the capacitors).

**Step 3-** Reconnect the negative battery cable to the battery

**Step 4-** Start the engine and allow it to idle in "Park" for five minutes.

**Step 5-** Place the gear selector in "Drive" with your foot firmly on the brake pedal and allow to the engine to idle for five more minutes.

**Step 6-** Place the gear selector back into Park and turn off the ignition. This should do it. The idle speed is likely to go up and down during the five minutes in Park and Drive as the computer learns the new idle speed. If this does not correct the problem, take the van to a professional.

