

Just Blowing Smoke ...the right way

“Blowing smoke” used to mean feeding folks baloney. Today it means you’re diagnosing a problem. But, since you’re in business to make money, you need to make selling a “correct diagnosis” part of every repair job. Wasn’t the old rule: “Test, Not Guess”?

Case in point. Our customer’s 2001 Chrysler Town and Country minivan had a problem that’s common: the “Check Engine” light was on. Since we sold “Scan for codes” as part of the diagnostic procedure, out came my trusty OTC Genisys™ scan tool. Tapping into the vehicle’s PCM turned up a P0456, code for a very small leak in the EVAP system. Most shops seem to think that just tightening the gas cap will fix this EVERY time. We knew better. We had just bought a new OTC LeakMaster 6525 EVAP approved “smoke machine” with UV Dye AND taken the time to learn how it differed from our older machine. What we found is that it really helps cut diagnostic time and increase accuracy. Here’s what happened.

The minivan had a Leak Detection Pump (LDP) EVAP system. Reviewing a printout of the related wiring told me the LDP had three wires: a power wire, a solenoid ground wire and a reed switch wire. Using the Genisys scan tool, I went to “Special Tests,” then to “Actuator Tests” to do the “LDP Systems Test”. Now I could activate the LDP vent solenoid that I had commanded closed.



OTC LeakMaster

I monitored the reed switch wire with my OTC DAT™ (Digital Automotive Tester) to get BAT voltage. I also applied vacuum to the vacuum hose coming from the engine to the LDP until the reed switch wire circuit opened, indicating Vent Closed. The system was then in TEST mode, ready for the big gun—the OTC LeakMaster 6525.

The tester was calibrated for a .020” leak because, and this is key, by code definition we weren’t looking for a LARGE leak, but one the thickness of a few strands of hair. Knowing that the EVAP system was now closed off, I took the OTC LeakMaster 6525 to the test port of the car and turned it to TEST. It started to pressurize the LDP system up to 13 inches of water column (about 1/2 psi). In less than two minutes, the ball in the meter showed the leak to be just a bit larger than .020”, Then, I rotated the selector valve to SMOKE. Within 45 seconds, smoke appeared

from the back corner of the mini-van. Total diagnostic time? Less than 20 minutes start to finish, and the UV dye helped me “see” the leak coming from the top of the tank. So, I knew right away where the leak was, and that the tank needed to be pulled. That, my friend is not just blowing smoke, THAT’S BLOWING SMOKE AND MAKING MONEY!

Till the next time, I’m Ron Ananian, The Car Doctor, reminding you, **“Good mechanics aren’t expensive, they’re priceless”!**

Ron Ananian - Owner-RVA Automotive aka THE CAR DOCTOR
As heard on the WOR Radio Network
As seen on DIY Television

