

Idle issue

Posted by Jump07 - 23 Sep 2009 01:39

My 1986 944 '24 Hours of LeMons' racer has been having some issues with a high idle. I'm hoping someone can help me out here. We just did the LeMons race at Buttonwillow and are getting it ready for the one at Thunderhill in November.

The engine is out of an early '85...but we have the DME and AFM from an '86.

Here's the deal...

it idles at 1100-1200 and will idle there for a while, and come back down to that if you blip the throttle before the car warms up. After the car warms up, if you blip the throttle it hangs up at 2000. If you unplug the O2 sensor it goes back to 1200 idle. But even after that, it started doing it again late in the race, with the O2 sensor unplugged. And it is always slow coming back down to idle.

We swapped out the AFM with the one from my race car, but there was no change.

Any ideas? Vacuum? Bad DME?

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Re:Idle issue

Posted by joepaluch - 23 Sep 2009 03:35

Try the throttle position switch (TPS). It will be telling the DME the throttle is fully closed, open, or fully open. It is a simple 3 position switch so just check that. If the DME never thinks the throttle is closed it can mess with idle.

Past that try to make sure the injection system all matches up.

So DME, AFM, Injectors, Idle valve, and DME harness are all the same (either all early or all late). I have mixed some of these at times, but never for very long. My 944 is an 84 chassis with 85.5+ DME harness and late injection. When I did my swap in 2000 I went full late set-up to match my late motor. Figured it was the most complete. I have at times used early DME/AFM as part of troubleshooting. The car ran, but never quite as well as with all late parts.

If you can rule out the TPS and ensure it is not late vs early mix-up somewhere then we can dig in further. BTW... run without the O2 sensor for now. The car should run in open loop mode just fine.

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Re:Idle issue

Posted by Weston - 23 Sep 2009 04:41

Based on my experiences, here's what I would do...

- Pull the throttle body off
- Remove the idle speed screw (it controls how much air bypasses the throttle plate)
- Clean all of the gunk out of there (a larger wire brush from a rifle/shotgun cleaning kit works well). Mine was clogged up pretty good.
- Put the screw back in, a few turns away from being fully closed
- Clean the throttle plate area and the rest of the throttle body
- Remove the TPS from the bottom of the throttle body and open it
- Clean out any oil inside of it (it probably has a little, but it shouldn't be completely full)
- Re-solder the electrical joints inside (I've seen them crack apart and stop working intermittently)
- Close it back up, replace the rubber O-rings if needed, and re-install it on the throttle body
- Adjust it so that you hear the TPS click when you close the throttle plate all the way. Use a multimeter to verify that the idle switch is functioning, and to verify that the full throttle switch is working too. It's a simple 3-wire connector, consisting of a common wire and two on/off switches.
- Re-install the throttle body on the car and make sure the throttle cable isn't putting tension on anything

when at rest. You should be able to slightly pull on the cable, hear the TPS idle switch click when the plate opens slightly, then let go and hear it click again as it closes. If not, adjust the throttle cable so that this is true.

- Now start the car, let it get up to normal operating temperature, and adjust the idle speed using the screw on the throttle-body.

If that doesn't fix your problem entirely, you've at least fixed the issues that you were going to run into next.
