

Rough Running, Wont Idle

Posted by AgRacer - 03 Jun 2013 18:00

So I developed a few problems at the conclusion of my last race.

As the week end went on, I developed a high RPM stutter where it felt like the motor would loose power but then climb out of it. I have since done some reading and think it may be the sweeper arm in the AFM loosing electrical connection in a sector of the sweep. I havent taken the cover off to inspect, but this feels like the right answer.

The more pressing issue is the fact that after the 1 hour enduro, my last race of the week end, the car would no longer idle and wanted to die as I was rolling into the pits. The car will start, and run with throttle application, but will die as soon as the throttle is released.

I have troubleshooted the following with no change to the problem:

New temporary vacuum lines

Swapped reference sensors (also tested resistance levels, no oscilloscope)

Swapped in an early DME/AFM as I have a newer style in the car (this actually caused the motor to not run at all which makes me think one or the other is faulty)

Tested/inspected the coil

Cap/rotor are new (cam sprocket bolt backed out at the race previous)

Spark plugs are ~3 week ends old

Replaced fuel filter

Verified that the fuel rail holds pressure, but unknown at what level

Unknown plug wire age

Unknown Fuel Pressure Regulator status

I am thinking of ordering new speed and reference sensors as well as an FPR just for peace of mind.

My thoughts are that the easiest viable fix at this point is that the FPR has failed in the closed position cause excessive fuel rail pressure and thus causing the injectors to shut down unless throttle is added.

If that isn't it, then some of my other research could suggest either a lifter or a valve spring failure or maybe even something more catastrophic in the head. I dont want to rip the camshaft assembly off if I dont have to.

Thoughts? Any easy way to look under the "valve cover"?

I was also running wide band data to my data logger that week end if anyone thinks that will help diagnose.

Re: Rough Running, Wont Idle

Posted by Sterling Doc - 07 Jun 2013 19:35

I have a few set of lifters. Email me at eric dot kuhns at gmail dot com.

Re: Rough Running, Wont Idle

Posted by AgRacer - 08 Jun 2013 15:08

Cam tower off after a leak down test showed complete loss of pressure on all cylinders. Visual inspection looks like I have floated valve seals.

I am guessing I shouldn't be able to see a rubbing ring with a spring (seal) pushed up the stem of the valve? Is this a valve seal that's been pushed up the valve?

EDIT: After removing the head, I confirmed that the exhaust valves are bent. It basically just looks like a love tap on the piston enough to not allow them to seat properly anymore.
