Please Help. Own a 1988 Toyota Camry Station Wagon; purchased brand new May 88. Vehicle has 286K miles on it; completely went through the engine this last summer. Except for a couple of things (a suspension issue I couldn't figure out & this problem); I've done all the maintenance over the years. 3SFE 4 cylinder engine; manual transmission.

So - for no confusion - the Starter works. Turn the key to start - the starter activates and engine rotates.

This last summer I also replaced all 4 fuel injectors; the fuel rail pressure regulator; fuel pressure dampner; cold start injector; numerous vacuum hoses; fuel pressure hoses; fuel filter; ox sensor; catalytic converter; throttle position sensor; distributor; power steering pump and hoses, egr valve; etc. Replaced a LOT of parts. All just to keep up maintenance as I rebuilt the engine.

Anyway - at some point this winter - the vehicle started not starting reliably AFTER it has been run for a few minutes. This kind of started with it at first having problems starting 'cold' - but then I replaced my original MAF (which doing tests on was slightly defective on one test (sometimes good; sometimes bad - it is intermittent on the test) - which fixed the problem of being hard to start cold. I also took it to local Toyota to figure out what was wrong; and told them it had trouble starting cold; and was developing problem starting warm - and they stated it was the injector time start switch, coolant sensor, and a specific efi relay. (\$136 flat diagnostic's fee).

I replaced all three of those components - but this made no difference - because those components were not defective or out of range, or intermittent.

Replacing the original MAF - caused the vehicle to be reliable starting when cold; and fixed a slightly high idle which I years earlier had replaced the ISCV (idle speed control valve) in an attempt to fix at the advice of Toyota.

So, now I have a very smooth running Toyota Camry; idling at 750; which has difficulties starting after you have initially started it up. You can let it sit for 5 days (I have); go out to it; and it will start right up. Let it run for two minutes; shut it off; and attempt restart. It may or may not start. Probably won't.

If you quickly remove the inlet hose (from air filter) going to the Throttle body; and spray in just a touch of ether - it will start right up. If you don't want to do that; my WIFE can easily push this vehicle 'fast enough' that popping the clutch causes it to start. (Compression start.)

If you let it sit after running it for 30 minutes; it will start right up again. A friend suggested possibly a breaking wire; and so we have jiggled the wires around the injection time switch which we replaced - but this had no effect. We have also replaced the new cold start injector with another new cold start injector but this had no effect.

We have replaced the new rebuilt MAF with a second rebuilt MAF. No effect. We eventually just recently replaced the TCCS (main computer) with a Blue Streak rebuilt one - this too - had no effect.

I have not replaced the fuel pump. It is the original. I do have a new fuel tank and fuel pump which I could put in. However - I have tested the fuel pump; and on all pressure tests - it is fine except for one (engine running at idle); on which it is just at the low end. 33 psi - which is technically ok. But I don't actually think this is the problem. And I don't think it is the fuel pump check valve - since it starts right up after sitting all night long.

It IS some type of fuel problem; since spraying in some ether - will cause it to fire right up. But this relates (I think) more to the starting circuit; and the various sensors which are giving input to the computer while cranking attempting to start. I own the Factory manual and schematics; and have studied them and looked extensively at the starting circuit; but I don't see what the problem is. The computer controls so much of this - is the reason why I recently replaced that. The circuit opening relay located (under the computer) seems to be functioning correctly. A 9V battery works one of the relay connectors; and two 9v batteries in parallel - close the other. (Per Toyota tests, etc. which ask at some point to put battery power on a couple of connectors.) So since it functions on 9v - I think that is ok.

I do wonder quite a bit about the wiring. But, not quite sure how just starting it up; not going anywhere; and then shutting it down 30 seconds later - would cause some wires to separate and for it not to start again except with ether or compression for the next 30 minutes or so.

Whether it starts or not (after initial startup) is intermittent. I go to the grocery store or the parts store; and just park on a slight hill. Come on back; and see if it starts. Nope, just compression it. On a flat; and just myself - a little ether. Two people; just give it a shove with your hand and pop the clutch....

The charcoal canister is original; and the gas cap is also org. I have recently unscrewed the gas cap a couple of times - but this had no effect. (hiss of pressure being relieved/but no help starting.)

The idle speed control valve has some miles on it... If anyone has a good idea or could elucidate me on what it might be from a very educated guess - I would very much appreciate it. I am at my wits end with this issue. I stated above that "I don't think it is..." quite a bit. However - I obviously don't know what it is; since I still have the problem; and I am writing to ask. So, it could very well be something that I don't think it is...

So please give some helpful advice. I am considering taking it back to Toyota; but a little peeved with them - since they told me it was several parts it was not; and they left those 'loose' so that I was leaking coolant on the way back from the shop.... (I think the mechanic thought why tighten it back up - we're going to replace these...) so I kind of understand that...

Also - NO the computer has not coded for anything with regards to this problem. It is an OBD1 system. And the vehicle has been running well enough over all of these years - that in truth - it has never given any code. For anything. I've tried to keep up on the maintenance. The vehicle has never been in any accident of any sort; and the body, etc. are all good. Wires do of course wear, and I recently opened up the passenger door - and removed the wiring harness of that door; and made some repairs to it - causing the window to once again be reliable.

Thanks for any helpful advice or expertise.