

D-Jetronic Jaguar info

This from ALL the scribbling's I have kept over the years, when keeping our 2 running as they were meant to.

- 1) Fuel pressure. Not the easiest to set up. I tried it by the book, damn that is frustrating, so I eventually got 2 Fuel Pressure Gauges, and 2 suitable "T" pieces, and inserted the T pieces into the fuel line just prior to each FPR, and attached the gauges. With the engine running at idle, and warmed up a tad, unlock the locknuts on each FPR, and rotate the centre bolt SLOWY. Inwards will increase the pressure, and outward will lower the pressure. One of mine was set at 29PSI, and the other ran better on 31+/- a bit, that is the nature of the beast. The book spec is 29-30psi.
- 2) If the engine is a non runner, and pressure/s need to be established. Connect the gauges as above, locate the "Fuel Pump Relay", and on sedans this is usually on the RH side of the radiator top support panel, and the 2nd relay in from the outside. CAREFULLY find the terminal #85, remove that wire, and earth it somewhere convenient. Turn ON the ignition, the engine wont remember, it's a non runner. the pump "should" run constantly with the ign ON, so be careful. Take the readings, and adjust as per above. NOTE, this is only to be used if the engine is NOT able run, and fuel pressure is an unknown. The pressure will/may/should change once the engine starts. Reconnect that #85 wire, and start the engine, if possible, and return to #1 above to complete the process.
- 3) Throttle Switch adjustment. My way is to remove the throttle capstan assembly (4 nuts, 2 rods, 1 cable), with the switch bolted on the underside. Obtain an OLD style needle type ohm meter (a digital meter will NOT work here). Looking at the top face of the socket of the switch, you will see markings for each terminal. 2/14, 17, 12/47, 20, 9. Connect the meter between terminals 12/47 and 17. Place a 0.030" spacer between the throttle stop of the capstan peg. Loosen the 2 mounting screws, move the switch until the needle swings to a "low" reading, tighten the screws, remove the spacer, and that needle should swing to a "high" reading as the throttle capstan returns to the stop peg. Do this as many times as needed to get it right. This is a fiddly setting to get right, so keep at it. Once done, connect the ohm meter to terminals 9 and 12/47, note the reading, and SLOWLY rotate the throttle wheel, and count the swings from LO to HI, and it should be 10 swings, as the internal "wiper" traverses the segments of the switch. This 10 count is needed, and any less requires a new switch. Once done, refit the assembly and reset the 2 rods.
- 4) Setting the throttle rods: Ensure the 2 throttle bodies are internally clean of the black "goo" that builds up over time. Insert a 0.002" feeler strip between the top of the disc and the throttle body bore, apply a slight pressure to the stop lever just aft of the throttle body. The feeler should slide out with minimal friction. If not, slacken the locknuts, and slowly rotate the stop bolts until such is achieved, secure the locknuts. Now the rods. Slacken the 4 locknuts (some are LH thread so don't be stupid and strip one), and rotate the rod in your fingers to "get the feel". Place a finger on the same stop lever as before, and rotate the rod until you "just feel" that lever "lifting off", then back it off 1/2 turn, secure the locknuts WITHOUT disturbing the adjustment. Now do the other rod. NOW, check the first one, then the 2nd, until you are 100% they are

equal. The first time you do this you will think you are quite mad, but you are fine, it is a fiddly thing, and the more you do it, the better you get at it. Like something else in life??.

- 5) Trigger Board testing for the 3 wire unit. This is direct from my notes. I have never used it, as I do not mess with that 3 wire board ever. I will always fit the 4 wire unit, as my sanity is flaky, and that 3 wire board will tip it over the edge. Unplug the 3 wire plug, the terminals are 21,12, 22. #12 is the centre terminal, and #21 & #22 are either side. Connect your needle ohm meter to #12 and #21, unplug the coil –VE wire, operate the starter and note the needle swing pattern carefully. Now connect the meter to #12 and #22, and do the same rotation, and note the readings. If they are the same, or very, very close, that board is deemed OK. If there is a variance in the swing pattern the board is a dud. NOW, since the V12 starter motor is easy to remove, NOT, I suggest doing this test with the cap OFF and use a magnet on a stick waved over each end of the board to simulate the rotor passing over the board. It will save the starter and your temper. NO ign ON etc is needed for this test. Replug the connector and coil once you have completed the test.
- 6) MAP sensor. That vacuum/electrical unit on the radiator support panel. Ensure it holds vac, as these things are old now, and they do fail. The bellows inside rupture. Repair is spoken of, I have never done it. Electrical test: connect the ohm meter (a digital unit might be handier here), to #7 & 15, reading of 85.5 to 94.5 is needed. Terminal #8 & 10 readings of 346.5 to 353.5 is needed. Terminal # 7 OR 15 OR 8 OR 15 and earth requires an “open circuit. Any reading of any of those 4 and earth is a dud unit.
- 7) EFI wiring loom. This is the fiasco low down in the “V”, and it WILL BE toast by now, unless some previous owner has rebuilt it, good luck with that thought. The injectors are fired in 4 banks of 3. 1A,3A,5A. 2A,4A,6A. 1B,3B,5B. 2B,4B,6B. There are 2 power wires, one for each bank of 6 injectors. With that loom damaged, the injectors are held open, don’t open at all, randomly open/close, in other words the engine barely runs. NO shortcuts available here. A rebuild of that loom is required. It is NOT hard, time consuming, YES.
- 8) Timing: I set them at 10deg BTDC static, and then trim that timing as I drive it.
- 9) Firing order: Simply think of it as 2 X 6 cylinder engines on a common crankcase, coz that is what it is. 1A,6B,5A,2B,3A,4B,6A,1B,2A,5B,4A,3B. The distributor cap will have a #1 cast into the top adjacent to the 1A post, and it goes “anti-clockwise” from there.
- 10) Ignition coil, nothing special here, a simple “contact points” spec coil is just fine. It must be a “Use with resistor” coil however. Anything with an ohms of 1.2 – 2.2 between the +ve and –ve terminals will keep it happy. Down here I use a Bosch GT40R.
- 11) Distributor cap carbon contact brush. There is a carbon contact brush inside the distributor cap, directly under the centre coil post. They burn away, fall out, and even with it burnt away the engine will run, albeit badly. If it has fallen out, engine is dead.
- 12) Spark plugs: I use NGK BP5EY, and gapped to 0.030”. These engines soot up plugs with the greatest of ease, so if you have had issue with it running/starting, they are probably sooted up, so remove them, clean them,

and start again. Sounds dumb, I know, but it is fact. They will NOT burn clean in this engine.

- 13) Cold start injectors. Major pain. I remove them from the inlet manifold, plate the opening, tuck the wires out of sight, and cap the fuel spigots with EFI rated caps.
- 14) WARNING: Never ever rotate this engine anti-clockwise as looking at the front. The timing chain plastic boomerang will SNAP, and your wallet will empty instantly. So, when you are setting the timing and go past the mark, GO ROUND again, PLEASE.

I have NOT touched on the Opus ignition system, as I don't use it. I replace them with the Crane XR700 kit.