

HE Tune up, Grant's way.

Make sure the throttle rods etc are all set CORRECTLY, coz if they are out at idle the damn thing will never be right.

Make sure the TPS signal is between 0.32v and 0.36v, if it is not the ECU will NOT drop into "closed loop idle mode".

Set the "static" timing at 10 deg BTDC, this will be close enough, BUT make sure you got plenty adjustment in the advance direction. Some set at 0deg on the timing plate, no matter, what ever you are comfortable with. I use the 10BTDC, as I have found that it is SO close to what you want.

Leave the vac hoses etc all attached, it is how you are going to drive it anyway.

With the engine warmed up, move the distributor until the engine starts to sound "sweet", and STOP. Don't go too far, you don't have to move it much, coz there is only 30deg between cylinders. Now go for a drive, take the screwdriver and 1/2"(13mm) spanner with you, stop at the curb, check the mirror, take off HARD, BUT BE PREPARED TO BACK OFF REAL QUICK, if it "pings. If it pings, back off the timing a "bit", if it don't "ping" advance it a BIT, then do it again, until you can take off hard without "pinging". The timing is DONE.

I have NEVER timed one the Jag way, what a waste of time. You go to all the trouble of setting it at 3000rpm, and lay under the front, with it jacked up, with all that shit spinning real quick right in front of your nose, I am NOT that brave, and then drive it and it "pings", so what do you do, back it off until it don't ping, duh.

Mixture adjustment, yeh right. There is an adjustment in the side of the case of the ECU, and it only adjusts the mixture at IDLE (hot), after that its on its own with the sensors etc. That adjustment is via a "D" shaped shaft and has about 12? clicks, end to end. I made a "special" tool for that out of an offcut of 5/16" fuel pipe, about 2" long (the metal pipe) used on most cars, inc Jag. I took a 5/16 bolt, and filed a flat on it so the shape was the same as the shaft in the ECU, then slid the piece of tube over it and "bashed" it into submission, hahaha. Drilled a small hole in the other end for a split pin to use as "T" to turn it. Now I got the Jag special mixture tool too. I would start with it in the central (close enough) position. It does NOT do much until the engine is at operating temp, and will do NOTHING if the previously mentioned TPS setting is NOT within its range.

When you get the timing right, slowly turn that mixture screw, and again, you will "feel" the engine "sweeten up" when its right. Now you may want to adjust this a bit from time to time, as the rubbish in the exhaust etc cleans up, again it is a "feel" thing.

Idle speed is subjective, but around 650rpm in P or N is OK, some like it higher, it purely is choice. The idle is adjusted by that 13mm bolt head on the side of the AAV, and REMEMBER, this adjustment is for HOT idle only, and has NOTHING to do with cold idle speed. That cold speed is purely the notches in the AAV piston, and as I have said toooooo many times, if that AAV does not close off 100% you are simply wasting your time with all the above. The AAV is a LUCAS item, go figure. I eliminate them, every time. There are other ways of getting cold idle extra air.

Make sure the air filters are installed BEFORE starting one of these V12's. They have been known to "belch" flames out the intakes. It's a female thing. Not good for the nerves or the paint nearby.

Timing adjustments are not required after you get it set. I have not touched mine since 2003, when the engine rebuild was finished. I just remove the dist cap once a year, to lube the centre shaft, that's all.

The only thing you will need to keep an eye on is the "gunk" that builds up around the throttle discs. The first sign of this is roughish idle, so clean them with solvent (carby cleaner or similar) on a clean rag. I usually do mine every oil change, which is 4 monthly.