

GT-500 Tuning Instructions

Start with 23-24 degrees of timing **nothing less for 93** + octane boost (16 oz – Royal Purple, Lucas, or Torco Brand), without octane boost start at 19-20 degrees. **STUDY FUEL SHEET REQUIREMENTS. YOUR CAR WILL NOT PRODUCE POWER GAINS EXPECTED WITHOUT THE CORRECT OCTANE. THE GAS PUMP IS MARKED WITH A RESEARCH OCTANE NUMBER (RON). THE ACTUAL MOTOR OCTANE RATING (MON) IS 3 LESS, SO.....93 = 90.**

12.0 Air fuel Ratio

NGK 7317 gap at .032

Make sure intercooler tank is bubbling good

Go max tension on bypass valve

Make runs for max dyno number at 150 motor temp. If air fuel is okay make 2 runs back to back

Do a clutch test on a steep hill, put in 4th gear and rev it up, see if clutch slips or engine dies when letting clutch out.

Make sure you are getting full throttle.

If Stiegemeier upsized your injectors, tell tuner to use stock injectors file...NOTHING ELSE. If Stiegemeier modified your MAFF, they will match your upsized injectors.

CAUTION: Data log IAT 2, RPM, MAFF volts, load, boost and spark – IAT 2 temps should be kept under 130 *. 100 or lower is ideal. At 170* you will blow up.

Drive car yourself start run at 2500 RPM in 4th gear. When the dyno guy gives you the go signal fullymax floor pedal go to 6500 RPM, then let up on the gas fully. The dyno guy has the breaks either way.

Turn down fan switches 25 degrees, so they come on sooner and run longer for 170 thermostat or thermostat delete

Have tuner make an intercooler pump run all the time

Make sure air filter is clear of any tin around it and out of fender

Crankcase should vent to atmosphere or install a venting system to the PIDs.

Depending on your plenum shape, 35-50+ RWHP can be expected, which includes blower, throttle body and plenum porting. Pulley upgrades can add to that total. Lower intake work can add 3 MPH in a 1/4 mile. It moves more air across the after cooler to reduce air temps.

A GT-500 above 550 RWHP – Injector service upsize is needed. For racing, fuel system upgrade needed and check valve in fuel hat should be removed and reconnected. I recommend Deatschwerks pumps & injectors. We offer this fuel hat build. Call for pricing. It is a good system. For gas or E-85, run a stainless fuel filter for E-85 and 95 lb injectors. Study fuel sheet requirements.

2.4 pulley makes 15#s boost at 17,800 RPMs. If running a 10% lower, a 2.7 upper is recommended - 18,500 RPMs and 16#s boost. This is a maximum blower speed for street driven cars. Race only cars can run a 2.4 and 10% lower – 21,000 RPMs & 19#s boost. A TVS blower max rotor speed should be no more than 18,500 RPMs.

Engine should have 20 inch vacuum at idle and cylinder cranking pressure of 150#. CAM swaps will change this a bit.

Blower takes 8-10 oz of oil. When changing, use a 15-50 synthetic oil.

Run a 5-50 synthetic in engine with a quality filter.

Stiegemeier offers a liquid cooled front drive – Venom Cooler. Works super well – reduces blower heat in half.

If possible, delete EGR & circulation tube from bottom of intake.

Robert Stiegemeier – 636-949-2275

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