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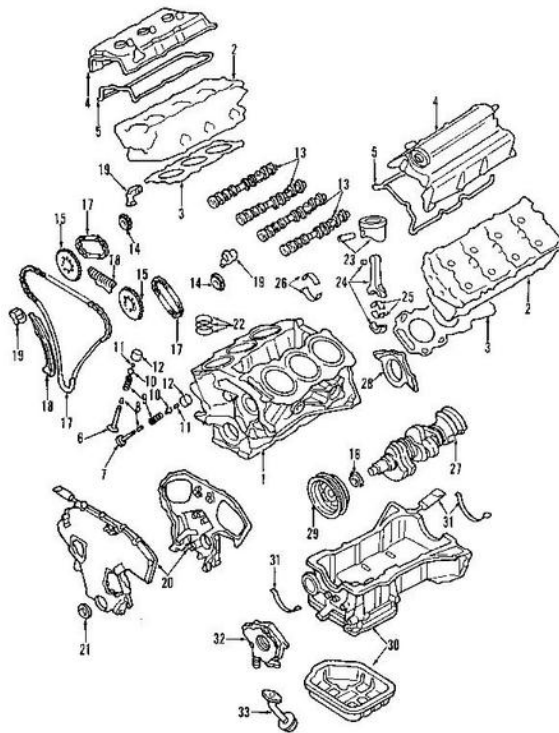
“TT FOR G35 AND 350Z” BY GOING DEEP

Now, some background...as many of us Z owners striving to seek more and more power out of our stock engine, I decided to buy a GReddy TT kit. Had it professionally installed and about a month later...catastrophic engine damage. I broke connecting rod #2 and subsequently it put two windows in my block.

So, I decided do it right and do a forged internal build up and I am only days away from finally having it done. But this thread is not about MY build up, it's about YOUR build up. I have put together a good plan on how to go about an engine build up AND forced induction to your Z.

First, the price of admission. For those of you that would like to go venture in the land of boost, the price of admission is a steep one....but well worth the cost!!!

If I had to do it all over....to minimize the time your Z is in the shop and to minimize the TOTAL labor costs and not risking blowing an engine...



Buy the following in this order...

1. A short block, this is basically just an engine w/o heads and a crank. See item 1. Since the block is brand new, you don't have to worry about buying a used short block and how it became a used short block. Believe or not, the small block will cost only about 1300. I say only, because this will become your build up engine. From here, you can sleeve it with AEBS only if you plan to exceed 600rwhp. Once you're reaching these power levels, you are in uncharted territory that less than a handful have ventured into. This of course will be inherently risky to venture where no one else has any experience.

2. Next, you buy a crankshaft. item 27. This will cost you about 550. Now, that you have a block and crank, you can get the bearing codes for the rods and mains and...

3. Buy the 12 rod bearings item 25 (there sold in halves) and order the 4 main bearings. This will only set you back about 200. You got off easy in this step. But there's more...

4. Now, pistons and rods. You shouldn't spend more than 2k here if you shop around. My suggestion would be to stay less than 9.5:1 compression ratio. In the simplest terms here...the lower the compression ratio, the higher psi you can run. The trade off, there would be a little more of a delay in reaching your peak hp in your power band. But, you will be less likely to run into detonation issues. Personally, I wanted 9:1, but ended up with 8.6:1 due to supply issues of pistons.

5. Okay, now you have a short block, crank, rods, bearings, and pistons. But a couple more internal parts to buy, ARP head studs and main studs. These should run you about 450 for the studs. There are 16 head studs and 16 main studs.

Now, you have reached a point where you can ship these parts to a reputable builder and they can build your engine. Make sure this shop has built one before and their machine shop has worked on a VQ-35DE. **THIS IS CRUCIAL.**

Now they can double check the clearances of your bearings and you have a "built" bottom end engine. One more thing to possibly consider in this step is to get a thermo coat on your pistons and bearings. There is debate on the longevity of the coat, but it doesn't cost too much though. Whats another few hundred bucks.

6. Okay, now this is the step, not step 1, is when you buy your favorite TT or single Turbo or Super charger that you have been having dirty fantasies about when no one is looking. Depending on the brand, each will have something or another you must buy separately. If you've made it this far, you would have researched the shortcomings of your particular kit. At this point you should consider thermo coating your turbo exhaust manifolds and exhaust turbine. This will allow you to keep engine temps down and keep the hot gases inside hot.

7. Now, you are in a really good position to start your build. But, a few more things to buy...of course. There's always something else to buy! But, the good news is that the remainder of the stuff is usually kept in stock.

NGK plugs...75

boost controller...450

Gauges....300-1200 (depending on number and type, + install)

Clutch....1k-2k (depending on brand, and you might as well do it while the engine is out)

Fuel sys upgrade...1k (or if you get APS, its in the price tag already)

Larger fuel injectors...500

Thermal coating.....300 This could be on pistons, bearings, or turbo "hot" parts

8. Once you get back your "built" engine, which would probably take 6-8 weeks if you're lucky. You can now drop off your Z at a good and reputable shop, and they can swap out the engines and install your TT at the same time. **MAKE SURE YOU GET A GOOD ESTIMATE OF ALL COSTS INVOLVED AND GET IT IN WRITING ALONG WITH A COMPLETION DATE!!!** Okay, enough with the yelling, lets continue. From here, this should take less than a month. So, your Z sat in a shop for less than a month and you have a built engine with TT. **AND** you were able to minimize downtime, costs, and you even spread out the costs of buying parts and the TT.

9. What do you do with your original short block? No, it does not become a new table in your nook by your kitchen!!! You will be able to sell it to the next guy. And he can still follow the plan I just laid out.

10. So, you read this part and now you are thinking I'm nuts or maybe the price of admission is very high. Well, you're right on both accounts. No, but seriously, this is the best way to go about it especially if....

a. You don't want to have your Z in a shop for 2-3 MONTHS

b. Your Z is a daily driver

c. Dont think you can take a short cut and just do TTs on stock internals. Come on now, that engine puts down 235rwhp and not designed to handle 350+rwhp!

d. You can't wait to read my kill stories again. Sorry, got off topic.

Now for the short list, yes it does exist. If you don't want to listen to the advice above, at least buy these at the bare minimum:

Connecting rods

Pistons

ARP Main studs/Head studs

Rod+Main, Bearings

Overhaul Gasket Kit

Rear Main Oil Seal

NGK one step colder plugs

Boost gauge

Oil Press gauge

EGT Gauge

AFR gauge

Clutch Upgraded

And the following depending on boost levels:

AAM Fuel Return System

Bigger fuel injectors

Okay, you survived reading my post. I hope I have taught you a couple of things along the way and as always I more than welcome questions, comments, corrections, and money. J/K. We are all here to learn about those wonderful little money pits we call "Our Zs".