

Max rebuild ...

■ Words & photos: Peter Ferguson

Having been one of the organisers for the “30th Bash” at Lardner Park in late 2019, I had undertaken a lot of work to find old NA MX-5s in the Club and get them to appear at our “Mexican Wave” – *what a sight that was!*

My own 1989 NA, known in the family as “Max” (I also have another NA known as *Eunice the Eunox*, and a pearl white 2010 NC known as *Pearl*), turned out to be the *fifth oldest car* we had there on the day and this, along with various discussions I have had with others in the Club, led me to take the view that I should start looking after the car better ... remove the performance mods I had fitted, and return it back to “factory” – and, in general, **try to preserve it as an original car.**

Nothing short of a full re-spray will make it look factory, but it has 32 years of “patina” on it which it wears reasonably well – not too bad for a car with 316,000km on the clock and, as far as I’m aware, still wearing most of its original components.

I have some small areas of vandal damage which I’m currently looking at getting fixed and hope to keep it “as is” rather than giving it a full a re-spray.

I have recently returned the suspension, wheels, exhaust and even the radio back to standard. The next bit on the agenda was the engine.

It had numerous oil leaks, including the rear main, so rather than try to sort in the car I took the engine out *four or so years back* with the intention of a quick freshen up and new seals – it was still producing good power so I thought rings and bearings would be plenty.

As I had a *spare* Japanese NB6 (yep, that says **NB**) engine, I modded it to run in the NA and eventually, in early 2020, took the original engine to the reco shop in Warragul for the quick freshen up. *Or so I thought!*

Along came COVID-19 and this, along with a shop owner who simply could not communicate, led to me contacting him every now and then with the question

of “*how much will it cost, when will it be done and remember, I just want a simple freshen up*” – after all, the car is on club plates and may only do 15-20,000km for the rest of its life.

I definitely did not want to “mod” the engine, not even a balance (but, being a performance shop, he could not get his head around this!).

With no firm answers coming and the shop clearly doing much higher-class work than I was wanting (a lot of drag and drift work where the minimum budget is likely \$10-15,000!) I pointed out I had a draft budget of around \$2,500 to \$3,000 in mind.

Without giving a commitment, I was led to believe “she’ll be right” and I let him continue. I should have known better – during COVID, he had one of the Walkinshaw Team engine builders working there – I think their usual work is a little more complex and challenging than NA freshen ups!

Of course the *quick freshen up* went out the window and nearly everything was done including a balance – *which I had specifically said three times I did not want!*

So finally I picked up the engine, all assembled, and once all the bits were in the back of the ute, was presented with the bill of just short of \$5,500! **Aaaggghhh!** There were of course all sorts of explanations and things they did not expect etc etc. ... and like a fool I paid it and drove away.

I figured that while it had cost a lot, at least it would all be correct.

Eventually I fitted the engine into the car and, after cranking without plugs to get oil pressure up (took long enough to make my bum pucker), I hooked everything up – only to find it was trying to fire but couldn’t.

My natural reaction is ALWAYS to doubt myself but, after



My growing fleet: three MX-5s, a MINI and an MUX



Mis-timed cams: No 1 @ TDC and cams SHOULD be at 9 and 3 o'clock, NOT 12 o'clock!



New clutch. Home-made crank lock to allow tightening of crank nose bolt plus clutch bolts



All new hoses including all “small diameter” ones (not shown)



New engine mounts

... returning a 1989 NA to “new”



eliminating all possibilities, I convinced myself that *my* work was OK.

Our next door neighbour is a foreman at a local car dealer in Warragul and deals with the engine re-conditioner.

I asked him to call in for a second opinion – in quick order we had the cam cover off to find *EACH* cam out by 90 degrees ... 180 degrees total! With #1 at TDC, the cams should have been at 9 and 3 o'clock; instead, *both* were at 12 o'clock!

Fortunately, between us we were able to re-time the cams without too much bother and she started first time.



New engine - ready to fit

Of course, when you spend this much on the engine, you want everything to be OK, so it seemed silly not to replace everything else – even items that were in fairly good nick (ie, clutch and pressure plate, *ALL* hoses, a new outlet casting as there was some rust on one of the small pipes, new engine mounts, new belts etc.)

I cannot thank Club member Andrew Tate enough who, as well as providing some good advice along the way, was able to source most of these bits at reasonable prices through his work.

During the course of all this, my brother-in-law in SA cooked his NA8 head and

has also done a full reco, including a changeover head (many thanks again Andrew!), and the entire cost was just over \$3,000, indicating my original “budget” was not too far off the mark.

So, what's it like to drive the car now it has done 1000km and has had its running-in oil replaced with *Castrol Magnatec*?

I have to say, it's very pleasant and – while not quite feeling fully like a brand new car to drive – with the new engine, exhaust and softer suspension, it feels pretty damn good. *I can understand what an absolute revelation the NA must have seemed when they came out in 1989.*

Compared with other offerings in the late '80s it must have seemed like a staggeringly great car – and the high numbers of NAs both still on the road and in the Club confirm this view. [We have a LOT of NAs in the Club – see Will's graph on page 7 of this edition.]

Even with the money I have spent, when I amortise this over 32 years it's pretty cheap and reliable motoring, especially when looking at how it has been driven at times.

There are not many cars (if any) from that era that were, and remain, this good! ●



Engine in ... now to fit up all the bits



Short nose crank: great care required with fitting up, new bolt and torque (see article *mxtra* – June 2021)



Lots of gaskets and bits to fit



A helper is really useful when removing engine/gearbox or putting back in – just to guide the gearbox



Cooling outlet with rusting corner on steel pipe ... tried repairing it but not confident, so another \$260 down the drain!