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SMOOTH

Milo's been flying thanks to a quality dyno tune!

SAILING

It must have been a year ago that Glen Hadden finally got through the reception desk at the Mudflats Rub and Tub and got me on the line.

"Roothy, we've been following the Milo rebuild. I know you've had the motor rebuilt in Melbourne and the turbo and pump done at Diesel Care in Tamworth. That's all good, but if you want us to put it on the dyno for a final check you'd be welcome anytime."

It was a timely offer. Although I'd chosen the best businesses in

their fields to do the motor, pump and turbo, they're both a long way from home and I'd thought perhaps someone should look at the overall package. Not that I'd had any problems – Milo's been spinning along better than new since the day Alan Grey, Boxer and I put her all back together. Much better actually, the old girl's never gone so hard!

But a few readers had commented on the excessive smoke occasionally, and while I figured it's more to do with the





AMMS owner Glen Hadden takes a look under Milo's bonnet before making a few suggestions to improve performance. Err, for the truck, not me, not when I'm honing the old skills for some Olympic darts action...

way DVD cameras work the light and the fact that Milo's exhaust pipe is more obvious than a Suzuki on 44s, there was just enough doubt for me to figure a check-up might be worthwhile.

While Milo and I spend most of our time crossing this big beautiful country, I often have problems finding time to cross town! Glen's AMMS workshop is located in Sandgate, pretty much the opposite end of

Brisbane to the old Mudflats. I'd had a few other offers to 'look at the tune' from more local businesses, but the thing is, this is Milo we're talking about here.

My problem was that with the motor finally right and the rebuilt turbo and pump working so well, the last thing I needed was some cowboy turning up the fuel and saying 'there ya go, she's running sweet!'.



Milo up on the rolling road. Four-wheel-drive dynos – ones that measure power at all four corners – are rare bits of very expensive kit, but when operated by the right blokes, they provide the total information required to get spot-on tuning



With Steve behind the wheel, Glen 'Eric Bana' gets ready to start the initial testing. I think they're looking for the ignition switch for the dual-stage rockets or maybe it's the parachute release handle that's gone missing again



Steve O'Donnell spends his weeks working on fourbies and his weekends on the tracks himself! Here he's fitting an exhaust gas analyser, which allows the AMMS team to get the air-fuel ratio absolutely perfect. Milo gained power and economy!

THE OLD GIRL'S NEVER GONE SO HARD!

"I RECKON THAT'S THE BEST \$600 I'VE SPENT"



Steve and Eric check out the computer readings. Milo's new Terrain Tamer rebuilt engine made a very respectable 74.3hp, about five ponies up on the standard motor output when adjusted for real-world axle power. That's the blueprint and balance work for you!

Unfortunately that's what a lot of so-called diesel mechanics do, because the bottom line on diesels is if you add more fuel, you get more power. Trouble is that unless it's done perfectly in sync with all the other factors taken into account, you'll get more power but you're going to make a lot of smoke before the inevitable big bang too!

So I took the time to check out AMMS first. Wow, this is one hell of a well-run operation! With the latest technology, an experienced and keen staff and a full Friday beer fridge – it was until my visit anyway – I knew I'd be back with Milo. The icing on the cake was talking to some other four-wheel drivers who swore they'd never go anywhere else.

With Milo on the computerised four-wheel-drive dyno – in two-wheel drive because we can – it was quickly proven that the motor, pump and turbo were as good as you'd get as far as standard specifications go. Better actually, thanks to a bit more TLC in the rebuild process. But Glen said they could get a few more horsies without sacrificing

reliability, and while in my long-distance touring-oriented book reliability rules the roost, I was keen to give it a go.

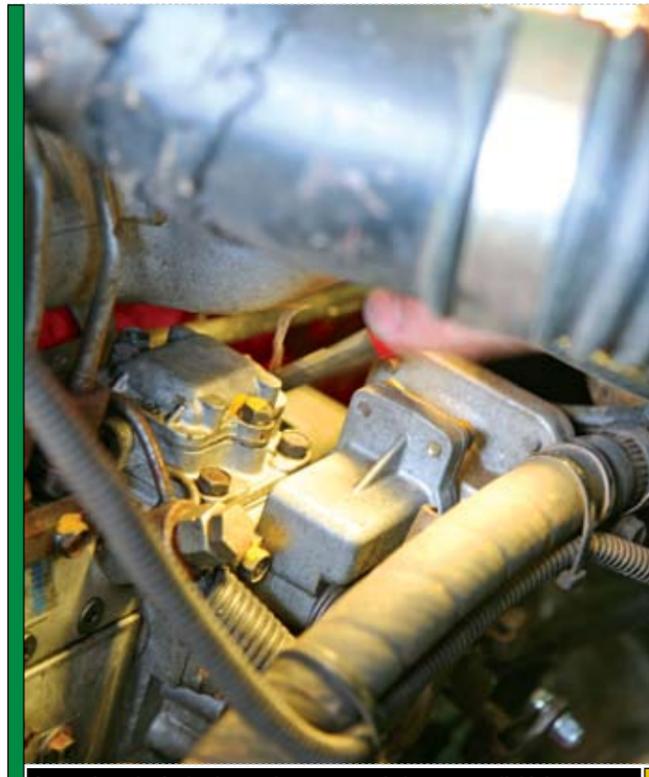
See, the only thing Milo lacks in the off-road stakes is a set of bigger tyres, but I've been wary of fitting 33s because the gearing is perfect with the engine power driving those 31s. To go up a tad in tyre size, I needed to find some more power or change the gearing, and after spending time with the AMMS team, I had the confidence to go for the sort of power they could extract while still keeping things as reliable as ever.

For me that amounts to a lot of confidence by the way, but I couldn't be happier with the result. With the boost controller fitted and the pump tuned to perfection, my old girl feels so bloody good I'm thinking of taking the Handbrake to AMMS to see what they can do for her. Only joking, no need to move the operation to Russia just yet Glen...

The numbers say it all – an 18.7% increase in power. But having done plenty of the old '25% better since I fitted the loud



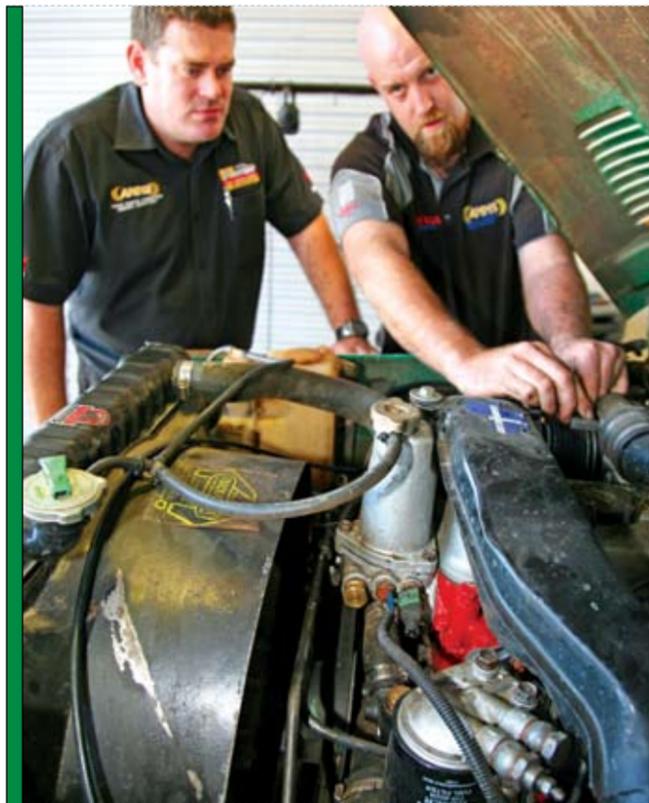
This little blue thingy is the boost control valve, which allows the boost pressure to be adjusted. Standard boost for the 13BT and as set by Diesel Care after the turbo rebuild is 7–8psi. Steve's taking it to 11psi to get a performance gain without sacrificing reliability



Steve gives the fuel valve on the pump a twitch or two to dial it in to sync with the new boost. As the AMMS crew pointed out, Milo's pump, turbo and engine rebuild were all done perfectly to original specs – their job is to take that and tweak it!



Wanting to know what would happen with a boost increase but the same fuel setting, I got the lads to give her another run. The result, as you can see from the graph, was a slight decrease in power to 74.2. Like Glen said in his best Roothy-tech talk, "diesels need more fuel to make more bang!"



Glen and Steve discuss the perfect pump settings and give the old girl a few trial runs to make sure they've nailed it. Making diesels run their absolute best is what AMMS is all about and I learnt heaps during my day out there. Glen had plenty of suggestions for other things that might improve Milo too



bm126 k IMG_0458.jpg: Here's one of them. With the boost at 11psi and the fuel dialled in perfectly to suit, Eric plucked the second stage of Cooky's exhaust system (before it narrows down for the muffler) and we grabbed a couple more ponies straight away. Fat pipes and big bends all the way DO make a difference!

muffler' type bullshit for about 40 years, what I hadn't figured on was how much real-world difference that'd make on the open road!

Straight out of the box, Milo roared all the way up the Cape, pulled a couple of thousand kilometres of tough tracks and roared home again, taking third-gear hills in fourth and passing cars and trucks with more flair than a Brisbane winger in the State of Origin. And when I did a fuel check back home – based on over 7800km worth of top-ups – I was blown away to find an almost 15% improvement there, too!

Wow, more power, better fuel economy and no sacrifice of reliability – I reckon that's the best \$600 I've spent. I spent the night down at the Mudflats raving about it and now Cousin Darcy reckons he's going to let them have a

crack at the family 80 too. Strooth, the wool cheque must be in, eh?

Before I go back to the darts board, I've just got to stress that bit about what to look for in any business that says they'll tune your diesel. Any mug can turn up the fuel – at a price you'll pay down the line. You need a team with technology and the experience on their side, a clean workshop and a reputation for doing it right. It took me a long time to discover AMMS for myself, but now I have, well, you'll see my trucks out there on a regular basis!

Phew, what was that Chooka? No mate, it was my shout last round. I might be sitting here working but I'm not that easily fooled. And grab another packet of cheese and onion too, eh?

Cop you later! *AMMS*

CONTACTS

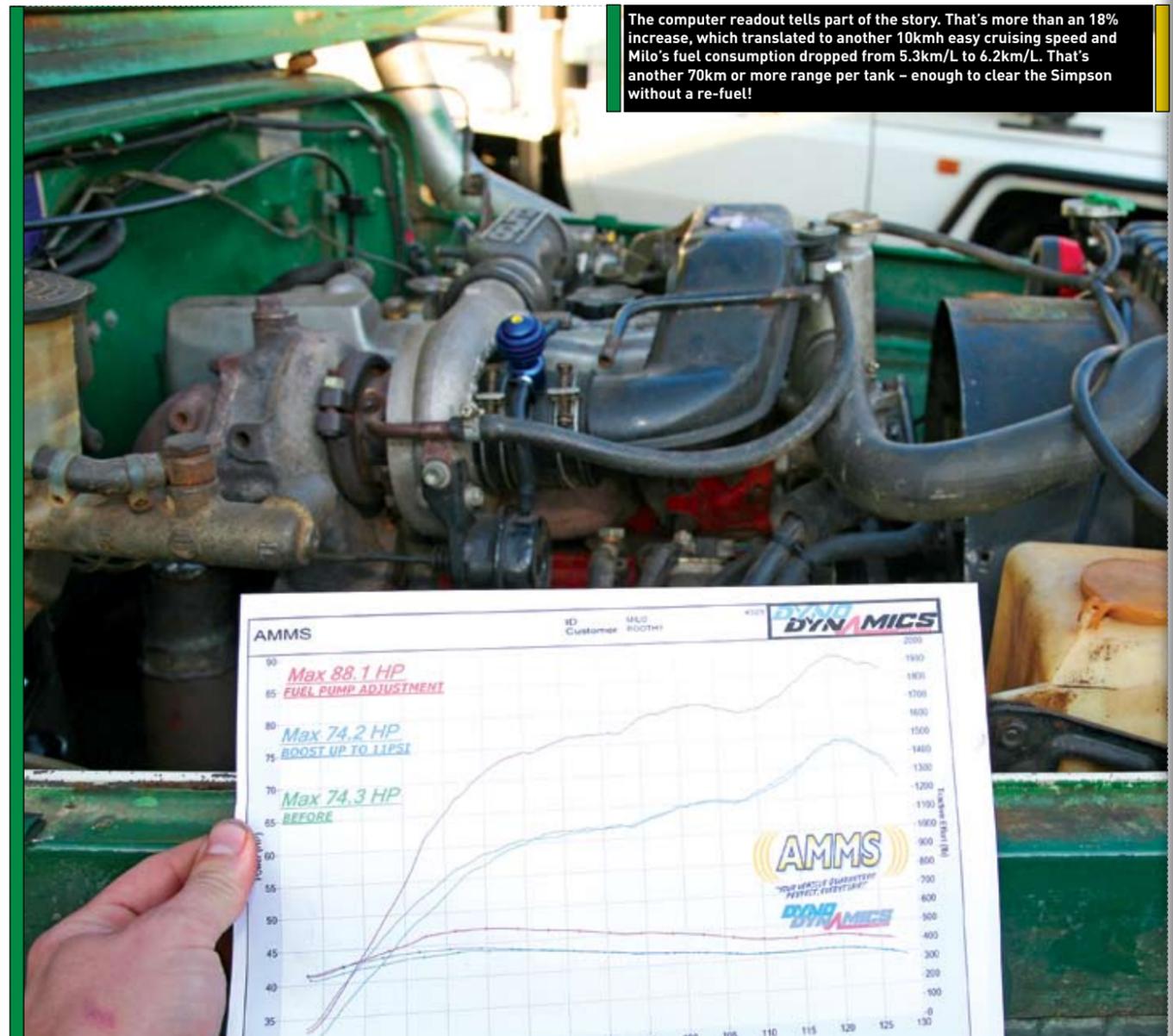
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These are the blokes you need to talk to. Noel, on the left, is the bean counter and he's seen here whipping Jason and Craig (the 'Fat Controller' on the right) into shape over a small discrepancy involving the Friday arvo beer fridge. Okay, I'll admit it now I'm safely back home, it was Chooka Morris...



Being one of the few blokes to have driven Milo, you can tell Steve's really impressed with the in-cab comfort. Full air – with the flaps open – AM radio (stuck on the ABC...), canvas bench seat and a cup holder. Wow, must make your GXL feel a tad primitive eh mate?



The computer readout tells part of the story. That's more than an 18% increase, which translated to another 10kmh easy cruising speed and Milo's fuel consumption dropped from 5.3km/L to 6.2km/L. That's another 70km or more range per tank – enough to clear the Simpson without a re-fuel!

