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NEWSLETTER SPONSORS



If you want to set a fast lap time or just want maximum grip on the road ADVAN tyres by Yokohama are the ticket. To find out which tyres to choose for track days click [here](#) or browse the full range of tyres visit www.yokohama.com.au



Get extra power and torque by updating your factory ECU to a FULLY ADJUSTABLE ECU with EcuTeK.

By utilising the factory ECU, you save by not paying for tuning you dont need! Use all the tuning completed by the manufacturer and adjust only what's needed. Your car will be more fuel efficient and more powerful. To find your local or international tuner, email [EcuTeK direct](mailto:EcuTeK@direct.com.au) or refer to the [website](#).

MRT INFO

- Websites
- [MRT Home](#)
- [MRT Performance Shop](#)
- [Discussion Forums](#)
- [Free Classifieds](#)
- [EcuTek](#)

MRT Online Updates

Back in May, after lots of feedback from our clients and readers, we gave our newsletter a much needed overhaul to make it more focused and compact, with clear information on what we at MRT can do to assist you with your motoring needs.



This month, we have done the same with our forums, retiring the old Snitz based system that has served us well since 2002 when we started our forums site. Our new **forums** site, based on vBulletin, has all the old data transferred across from the old forums, but also has the advantage of being faster and more stable, much easier to use, much easier

to locate relevant information, and allows users to upload relevant images and pictures that was not possible previously. It also, like the newsletter, looks a whole lot better! Our forums are a great place to ask questions about your car, or find out as much information about potential modifications, services, etc, so we recommend you **register** if you haven't already done so.

With the newsletter and forums now updated, we are now planning the upgrade of our main web site and online shop, and as valued members of the MRT community we would like to seek your feedback regarding your experience of using the MRT website and suggestions for its improvement. We would be very appreciative if you could find the time to answer an online survey regarding our web site which will help us to deliver the features that you, our readers and clients, want. Also, all responses to our survey who supply their contact details go into a draw to win a 4Gb iPod Nano. Thanks in advance for your feedback. Click [here](#) to participate in the survey!



MRT Track Days



Often the most fun our clients (and us!) have had are at track events where there is no pressure to win and where we are with other people who have the same aim, to have fun driving their car to a limit they are comfortable with. We get numerous queries for info on how to have fun at the track, as well as information on the regular track days we conduct.

Accordingly, we have created a document that is designed to fill in the gaps and provide this information. Whilst it is written based on Sydney events, the general info and reference to tracks and FIA affiliated sporting associations are probably relevant for your local city, state and country. Enjoy!

If you are interested in coming to the track, our next Track Day is on July 27th at Wakefield Park near Goulburn - more info [here](#).

[Download Track Days document](#)

Source: MRT

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Workshop

1 Averill Street
(corner of Concord Road)
Rhodes NSW 2138

Tel: (02) 9767 4545

Fax: (02) 9767 4599

Book your car into our workshop via email

Order Online Parts via email

UPCOMING EVENTS

4th - 8th July

Suncoast classic Tarmac Rally, Noosa Heads

27th July

MRT private track / test day, Wakefield

Dutton Rally, WA

4th - 5th August

Australian Rally Championship, Adelaide

4th - 5th August

Round 6: WRX, Aroca, SSCC HSV
supersprint series, Oran Park GP

PARTNERS



RESELLERS

Australia

NSW

MRT Performance

Saker Race Car

We often get unusual cars in the MRT workshop, however some, such as this car, are unusual than normal! Originally manufactured in NZ, in the early 90's by Bruce Turnbull (designer), this unique car was slowly developed into various forms. Some have V8 engines, some twin turbo V6 Mazda's! Also available as a "spyder" version, the design of the car was licensed to a company in Holland where it is sold across Europe.

This particular car belongs to a client of MRT and naturally features a Subaru turbo WRX STi engine with a 4wd Impreza gearbox modified to utilise the front axles only. This is the only one actively racing in Australia, however another version is in Melbourne which originally was imported to attempt to be road registered, this has since been converted back to a race car.



This Saker race car features many design options created by our client himself. The huge LeMans style rear tail and extra front wing are just some examples. It regularly competes in the Australian AMRS race series in the thunder sports category. An example of its capability is in "road tune" - its as quick as a V8 supercar! Nice!

[Download full article here](#)

Sources: MRT, AMRS

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Feature Article - 2.5L Sleeper WRX Wagon

This article can be downloaded as a pdf [here](#) if preferred.

Over the past four months, we've listed four pretty hot MRT enhanced cars ranging from an insane 400+kw ATW MY00 STi, a rally prepped 300kw MY99 STi, a MY03 STi making huge power from a standard 2L block, and MRT's own awesome handling Evo that whilst not in the same power league as the previous cars, handles on the road and track like few other cars. So now we come to the last of the five cars, you'd be expecting us to showcase the most impressive of the all.

Well – ahhh, no, not exactly.



Don't get us wrong, we are very proud of what we have achieved with this car, but if you were to see it on the road, you wouldn't give it a second thought. Why? That's because our final car is none other than a dark green daily driven bug-eyed 2001 WRX wagon. No big wing, no

bulging panel work, no massive drainpipe for an exhaust, and its usually fairly dirty as it doesn't get cleaned very often: we can only assume that the owner seems to be taking Sydney's current water shortage fairly seriously. The perfect sleeper perhaps? So most take little to no notice of it on the road or track – that is until they see it in flight!

This car started off just like so many other client's cars. It started off with the usual exhaust upgrade, but as was being experienced by new MY01 owners, exhaust upgrades only didn't have the effect as pre '01 models due the ECU compensating and retarding power, so an ECUTEK Type 2 upgrade followed along with 550cc '02 STi injectors, Walboro 400hp fuel pump, VF34 turbo, MRT fuel rails, MRT cold air intake and a '02 STi intercooler to deliver a respectable 180 odd kw at the wheels. In short, basically what the XC kit is today. In addition, the car had MRT sport brake pads fitted, Whiteline control springs, strut braces front and rear and Whiteline adjustable swaybars front and rear to reduce understeer, keep the car flatter around corners and generally improve the basic handling and grip of the car.

GFS Performance

Power Tech Performance

VIC

Horsepower Factory (formerly Amberley Autos)

ACT

Ultimate Tunes

SA

S & J Automotive Services

QLD

Mercury Motorsport

Oracle Performance Motorsport

Cairn's Leading Automotive Services

WA

Maximum Motorsport

Race Torque Engineering Pty Ltd

OVERSEAS

BRUNEI

Tze Shen Lim

CHILE

Importaciones Maxspeed Ltda

COSTA RICA

Subaru of Costa Rica

CYPRUS

SG Technocar Ltd

GERMANY

AK - Motorsport

HUNGARY

Lsport Racing

ISRAEL

Guy Millo

ITALY

Target Evolution Snc

JAMAICA

Jim Enterprises Ltd

NEW ZEALAND

Torque Performance

PERU

Carlos Hiraoka

SOUTH AFRICA

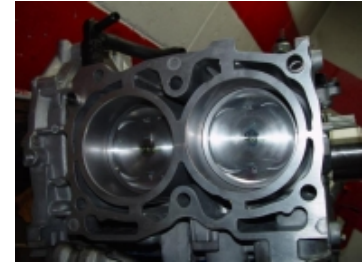
NxGen Performance

SWITZERLAND

Wyrsh Motorsport

At this point this MY01 wagon was fairly modified and pretty quick in both a straight line and around the twisties and had gotten to a stage where most of our clients stop. That is until Subaru introduced into the US in 2003 an engine that would change the WRX and STi performance scene in Australia – the EJ257 (2.5L).

The Americans are well known for getting more grunt from an engine by increasing the cubes (size), and the EJ257 gave the WRX and STi an easy way of easily fixing the treaded torque hole below 4000rpm. By early 2004, spares stock in the US meant that it was now possible to get the engine imported into Australia at a decent price, and our client frustrated by the lack of power



down low in his car came back knocking on our door. He had already imported the EJ257 short block and knew that MRT hadn't done a 2.5L transplant before (although we had done heaps of stroker kits for 2 and 2.2L cars), did we want to try? Here at MRT, we could see that the 2.5L was going to have quite an impact and would one day be imported by Subaru Australia in current WRXs and STis (which it has been since the MY06 models), so we sat down with the client and proposed our first partnership of the **MRT Vehicle Development Program (MVD)**.

Ever wanted to know how come MRT knows so much about building both robust and monster 2.5L engines? How we know which are the best bearings to use, what the safe boost limit is for the standard hyperthermic pistons, which cams and heads combinations work best, which turbos are the best match for which application, etc. Simple – because this WRX was our major 2.5L R&D car and we tried pretty much every combination imaginable with it between mid 2004 and mid 2005 to find out which component worked best. The engine was removed and reinstalled nearly 10 times in total as we tried everything in an effort to build the most reliable powerhouse possible.

Now you're most likely thinking that with the engine out that many times this car must have been off the road for a while, and you'd be



right. But that is where the MVD program comes in. We had a deal with our client that accounted for this so in return for losing the car for 2-3 months over the period of a year, he ended up getting a car that was b&\$%dy quick daily driver that we ensured had the best components in it for way less than standard rates.

So how quick is this car? Well it isn't our quickest, that would be the monster 400Kw MY00 STi, and it isn't our prettiest, but the net result is a bit over 300kw ATW on a dyno dynamics dyno (and even more on the MRT hub dyno) and over 600Nm of torque at the flywheel. But forget the numbers (as in the end they are only numbers) – how does this car fare in the real world? Try an 11.2 down WSID, and then note that it wasn't built for the strip but for the track. It has managed an impressive mid 1.07 at Wakefield in damp conditions and on the track has claimed scalps including the Lotus Exige, Ferrari 360, Lamborghini Gallardo and Porsche 996 and 997 GT3s. Not bad for a bugeye wagon!



So what's in it? Nothing that special actually, in fact the usual MRT 2.5L treatment (as would be expected as this is the car used to develop it).

The EJ257 block (STi 2.5L) is fitted out with forged rods and pistons, and the existing MY01 heads have been retired in favour of some heavily worked MY99 STi heads with custom MRT cams designed for mid-range power. Other engine enhancements include a Hyperflow front-mount intercooler (painted black for stealth), a MRT CAI and silicone air intake, STi RA inlet manifold, HKS exhaust manifold, MRT 3 inch exhaust with high-flow cat, GFB pulley kit, GFB Stealth BOV, and APS SR55 turbo all controlled by an Ecutek custom MAP tune and Blitz id-III to control the 20psi of boost. Fuel is delivered by a Walbro 500hp fuel pump, MRT fuel rails with twin regulators and 800cc injectors.

MISSION STATEMENT

Vision:

To be the best motor vehicle parts and service company in Australia

Mission:

Happy Clients

- We aim to service customers that appreciate the quality, knowledge and value that we provide.
- By accurately assessing client needs and supplying service and parts in a professional manner.
- By manufacturing or sourcing the highest quality parts at competitive prices.
- By having great systems that support our team in delivering exceptional customer service.

Happy Employees

- By having great team members who are well rewarded and committed to the MRT vision.

Happy Suppliers

- We will find suppliers who are keen to partner with us to develop long standing relationships and produce exclusive quality services and parts.

Happy Shareholders

- By delivering a good return on investment.

CLIENT COMMENTS

Hi Brett, Thanks for your and the team's time today.

I just wanted to say that, for what my opinion is worth, I find the customer experience at MRT to be great and that it is really evident that you have thought out every aspect of your service. The ability to work and access the internet, approachable and well spoken staff, a genuine effort as ensuring client needs are met, seeking feedback . . . even the nice little MRT keyring things (vs crappy bit of card), they all say quality to me.

I would definitely recommend to others that they use MRT for car service and all your other offerings. Your service is far above dealers for example.

I guess your business coach has helped with such things but it's gotta be your commitment to such quality that really drives things, and I am really pleased to be able to contribute in my little way. AFAIAC your 'brand' is all of the above, not just a

As mentioned earlier, this car was built with the street and track in mind, and the standard suspension, drivetrain and brakes were obviously not up



to the task of controlling the massively increased power. In addition to the Whiteline swaybars and strutbraces already on the car, Whiteline Group 4 coilovers and an ALK kit have been added, and the car corner-weighted. The standard tyres have made way for Falken 225/45 RT615s on the stock rims which offer much higher levels of grip.

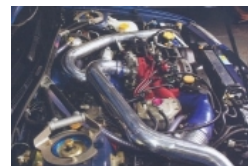
The old 5 speed gearbox was removed to make way for a STi MY04 6 speed gearbox complete with STi driveshafts, R180 rear diff and STi brake hubs which significantly reduced the understeer through corners. Indeed, the car is currently setup to slightly power oversteer on corner exit, as long as corner entry speed is correct! DBA 5000 rotors on the front and DBA 4000 rotors on the rear assist with the braking, combined with SBS dual carbon brake pads, heavy duty brake fluid and a MRT master cylinder brace allow the car to do 20+ hard laps around Wakefield with minimal brake fade.



So, is there anything not so good about the car? Well, for a daily driver its got pretty hard suspension that is a touch too firm for Sydney's low quality roads. Also due to the number of times the engine was removed, its R&D nature, and the fact this was our first 2.5L build, piston slap in the engine is more noticeable than on later cars. Indeed,

the car is back at the workshop now to have the block sleeved to quieten the engine and also have the main bearings changed to a different brand (as our R&D indicates that the genuine Subaru ones are more prone to failure than the aftermarket brand that we now use).

Putting this into perspective though, trade-offs are always required when chasing big power and maximum grip levels, and few cars achieve a balance as well as this MY01 wagon. Indeed, few heavily modified WRXs of this level can boast being fully engineered and ADR compliant – an achievement we are proud of. Also, most cars of this modification level are only driven weekends and special events, yet this car often has a baby booster in the back, a tow-ball for a trailer, and uses the same ECU map and boost settings on the street, track and strip, and has done so for the past two years.



So what can be taken away from these 5 cars? Simple. In addition to our proven **XA, XB and XC kits**, for car enthusiasts who want even more from their vehicle, MRT can build for

you an awesome weekend warrior (Article 1 - 400kw ATW MY00 STi), a rally prepped champion (Article 2 – 300kw MY99 STi), amazing road car using standard internals (Article 3 – 295kw MY03 STi), awesome handling street and track car without the heavy engine modifications (Article 4 – MRT Evo 9) or a monster daily driver that excels on the street and track (Article 5 – 300kw ATW MY01 WRX).

To find out how to transform your car further, call us on 9767 4545 or contact **Brett** or **Chris** via email.



Source: MRT

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New Ecutek Delta Dash released

logo and marketing collateral - the whole client experience needs to be cohesive and yours is great in that sense.

Cheers, Steve

(More client comments can be viewed [here](#))

MEMBERSHIPS & AFFILIATIONS



Do you Ski, or want to learn, and need some reasonably priced accommodation? Always wanted to know how to get access to those private ski clubs? Then click [this link](#) and mention Brett's name as a reference to this private ski club at Falls Creek and Mt Buller ski fields. Don't pay ever commercial rates again! Prices start at \$62 per night! Both premises are true ski in ski out and no walking is needed at all!



Oldina Ski Club

Ecutek have released new Delta Dash displays which are bigger and better than prior model with better user updateable screen, additional inputs, additional information on screen and more. Some of the many fantastic new features include:



- 256 x 64 Graphical VFD display
- RPM and Boost in bar graph and numerical form
- User defined display setup
- User updateable software
- CANBUS and USB ready hardware
- Water Injection / Nitrous control
- User tune control for Pap Switch and Engine rev limiter
- Track day functions including 0-100 KPH, Standing quarter mile and road dyno

Delta Dash still retains all the old functionality in addition to some of the new features listed above, so call MRT on 0297674545 or [contact us via email](#) to get yours now.

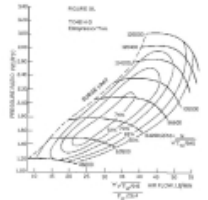
Sources: MRT, Ecutek

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TECHNICAL / RECOMMENDED READING

New MRT Technical Document - Turbocharger Compressor Calculations

Building a monster engine and want to know what turbo best suits the purpose? Just curious on how a turbo works? The purpose of [this document](#) originally by John Estill and the Turbo Regal Web Site is to show how to calculate the volume and mass of air moving through his engine, and how to size a turbochargers' compressor to move that quantity of air. It should also offer some enlightenment of the effects of temperature, pressure, and intercooling on the engine's performance.



This is a serious technical document that delves deeply into the physic of turbocharging - ENJOY. Read or download it [here!](#)

Link release new LinkPlusG3



The new LinkPlus G3 now available. "Heaps of low down power compared to stock or reflash - it just hammers everywhere and I'm not even at full power yet" is the report of one very satisfied customer.

The first two batches have sold like hot-cakes, so Link has ramped up production, with the next batch arriving late June. Ne new LinkPlusG3 offers unrivaled performance, value and an impressive feature set, including:

- Up to 24 User Programmable Auxiliary Outputs
- 25 Configurable Input Channels
- 3D/4D Sequential Fuel Injection Control
- 3D/4D Ignition Control
- Plus much more



Place your order now, as pre-sales are filling up rapidly. Click [here](#) for more info on the LinkPlus.

Sources: Link, MRT, John Estill, Turbo Regal Web Site

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News

The Subaru WRX name - is the beginning of the end here?

Subaru fans around the world are wondering whether the WRX name is on the way out after Subaru dropped more than a decade's worth of branding effort by renaming the Impreza WRX in Japan the S-GT. Also, the neither the WRX (or the S-GT) is being offered to Subaru's third largest overseas market - **the UK**. The only turbocharged Impreza to be offered there is the Sti, due in 2008.



According to the company, the name change is because the hand that feeds also has an itchy trigger finger. Product planning viscount Naoyuki Yamauchi says the company aims to take some of the perceived edginess away from the midline sports model. Apparently customers were being scared away by the rally connection, which was at odds with the company's plan to make the WRX model a volume seller. The ride feel, Yamauchi says, has also been retuned to be less rigid and thus having more mainstream appeal. But alluding to the STi, Yamauchi says the company won't leave its strong enthusiast base in the lurch. The next year looks like it will be interesting . . .

[More »](#)

Dean Herridge claims a dual podium finish in the Rally of Canberra



Fresh off a dual podium finish at last weekend's Rally of Canberra, in which he claimed second outright in the NEC Australian Rally Championship and a strong third against the Asia-Pacific contingent, Dean Herridge speaks about a tough weekend out in the Nation's Capital, his Championship prospects and the fresh challenge

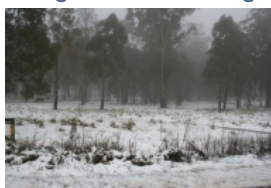
of competing in China.

At an event that has a reputation for breaking cars Dean Herridge entered the Rally of Canberra, in which he was eligible for both the Asia-Pacific Rally Championship (APRC) and the NEC Australian Rally Championship (NEC ARC), with a cautious game plan with the aim of driving for a podium finish.



"We knew from the very start that this was going to be a really rough rally, it always is, so the plan was always to drive at a pace that felt comfortable and to ensure that we didn't have any problems along the way," explained Dean. [More »](#)

MRT goes snow testing



On the 21st June, Sydney got some unusually cold weather, a head of rain and this included snow on the route commonly used for two of our staff travelling to MRT. Ben Taylor, MRT's sales manager got "snowed in"!

Now for some readers who are overseas this may not be unusual, but here in Australia it is! Here are some pics of the efforts MRT staff go to get to work (and test parts too of course)!



This is all tongue in cheek, of course but yes it did snow and yes that's our MY07 STi. If you have some interesting snow pictures of your car, please [email](#) some low res pics and a brief story.

News Sources: MRT, Rally.com.au, Jalopnik.com

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Liberty GT 2.5L Update

MRT have been rapidly moving ahead on ECU tuning and power kits for this model with complete ECU retunes using **EcuteK** technology now available. Here is what one of our clients have already said:



"As I am already convinced with just a small bit of city driving the money output for the

upgrade is already well worth it and I would not hesitate in recommending an upgrade for those who sort my opinion." - Mark Rosenthal, Sydney

For more details and how MRT can assist you with this model follow this [link](#).

News Sources: MRT, Rally.com.au, Jalopnik.com

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MRT PRODUCT SPECIALS



This month, we have the following clearance parts at bargain values and also our regular specials. Contact our sales team on 02 9767 4545 or by [email](#) for these special deals!



- For the month of July only, order a MRT **XB or XC Power kit** and receive a **GFB Quick shift kit**, fully fitted to the value of \$350.
- **Ripper deals** on IHI VF34 - AUD\$1290 each (incl GST). Limited quantities at this price, so hurry).
- Brett's Bargains (last updated 01/05/2007) ([View topic](#))
- Free classifieds ([View forum](#))



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VIDEOS OF THE MONTH

- How to drive a Hummer in Iraq. ([Watch video](#) - requires Windows Media Player)
- Top Gear Evo 8 vs the Lamborghini Murcielago. This video has been around a while, but shows what you can do with decent modifications to your car! ([Watch video](#))
- Subaru Rally of Australia 2007 mineshaft crash ([Watch video - Front view](#)) ([Watch video - Side view](#))
- Think your turbo is big - check out this Toyota Supra! ([Watch video](#))



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POLL OF THE MONTH

No poll this month, instead inline with our lead article, we are asking all of our clients and newsletter readers to provide feedback on our website and other online services to help us provide you with better service and products.

We would be very appreciative if you could find five minutes to fill in this online survey and give us critical feedback. All feedback will be kept 100% confidential within MRT, and the survey will remain online until the end of August. All survey responses that include contact details also go in the draw to win a 4Gb iPod Nano which will be drawn when the survey finishes midnight, 31st August, 2007.

Participate in Survey [here](#).

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Message from Brett Middleton



Stay tuned for next months update, and please give feedback on things you'd like to see include in future newsletters (the best suggestion every issue will be given a \$50 AUD credit for any parts purchased with MRT).

We value your feedback and your thoughts are important to us, please click [here](#) to e-mail us. Don't forget to refer your friends to this newsletter - they can sign up to receive it every month [here](#).

BRETT

- * Dyno power figures are subject to a 10% variation as a result of local temperatures and fuel.
- ** Parts must be paid for and shipped by the end of this month, and must requested at time of initial order via the MRT online shop.
- *** Prices all quoted in Australian Dollars. (AUD) For easy conversion, refer to: <http://www.xe.com/ucc/>.

To stop receiving these newsletters (or to change your e-mail address), please click [here](#) to send an emailed cancellation request.