## The MGZT 220S – The Turbo from Oz.

## Jeff Turnbull

As Aussies have desired to do almost since the motor car first arrived on our roads, we love to take a car and 'fiddle' with it a little bit, in order to extract that modicum of extra power, torque and performance from the vehicle. We seem to delight in driving something a little out of the ordinary - with perhaps a little more 'kick'. Witness the way we have taken on board what Holden Special Vehicles (HSV) have done with our trusty Commodore over the years. Even before that – the evolution of the Monaro from the standard HK Holden range of 1968 and of course – not to mention the Torana GTR XU1 and SLR 5000.



Yes ... we can't help tinkering with the original product just to get a little more 'grunt' out of our machines.

The MG tradition of tinkering with their racing cars, particularly to extract greater performance from the smaller engines by the use of turbochargers, has continued through the decades with reasonable success. However, fast-forward to MG Rover's ZT range introduced in 2001; the Rover KV6 power unit was the engine of choice and this one couldn't be considered small in any manner of thinking. Yet, in some circles, the quest for more power was evident (without going all the way to a V8). It is understood that in Britain,

thoughts of placing a supercharger on a ZT, KV6 engine were at least entertained, if not actually completed. A turbo certainly was fitted to the British derivative of the ZT – the 1.8 ZT 160 – a smaller-motor version that was not to be seen in Australia. Released in October 2002 in Britain, it was fitted with a Garrett G29 supercharger with T100 wheel design. However, there were problems – enough to make Aussies shy away from the 1.8, 4-cylinder ZTs altogether and in 2002, the KV6 models only were released in Australia by MG Rover Australia.

At 2.5 litres and 190 PS for the standard Quad Cam V6 engine on the 180 (auto) and 190 (manual) versions, surely there was enough power in the regular KV6? MG Rover stated that the manual ZT sedan could reach 0-100km/h in 7.1 seconds. – fair enough! But maybe not for some drivers.

Enter the MGZT 220S in 2004 – a supercharged version of the standard ZT aimed directly at those who liked a little more power via the inclusion of a recognized modification which would not void the new-car warranty. Without going all the way to that 'brute of a car' the X-Power V8 260, this was an alternative which, it was initially claimed, up-ed the power of the KV6 by an impressive 20%!

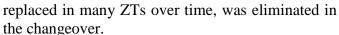
It is good to report that this was an all-Aussie MG ZT innovation that arrived in the last year that the ZTs were



sold in this country. It involved sending the selected ZTs to the Western Australian company, Australian Automotive Components to have Sprintex Superchargers fitted. Sprintex Superchargers is today, a wholly-owned subsidiary of A.A.C. and was established over 25 years ago in the United Kingdom. In 1987 the company re-located to Australia and has ever since, been producing and developing its patented Twin-screw Supercharger for clients around the world. The unit produced by Sprintex is patented and registered, and is considered today, one of the world's finest supercharger technologies. Therefore, I suppose, we can claim the 220S as an Aussie MG.

Meanwhile in the U.K., some Sprintex Supercharger units were fitted to a number of ZSs, with rather unsatisfactory and indeed, disastrous results. This prompted bitter debate as the result of a number of engines literally blowing up on the road! A blame-game followed with Sprintex accusing the installers and vice versa. This effectively soured any further desire for super-charged 'Zeds' in the U.K.

So what was involved in the Aussie ZT conversion? For warranty reasons, only qualified Sprintex technicians completed the process. In the procedure, a fabricated inlet manifold replaced the original unit, secondary fuel injector and control ECU. It had a new boost bypass value, mounting brackets and a twin screw supercharger. Manual versions were also fitted with a higher-rated clutch to ensure that there was optimal power delivery. One further positive, (albeit unintentional) for the ZT was that by installing the supercharger unit, the standard intake manifold which has proven unsatisfactory and has had to be





On completion, all vehicles underwent the calibration of engine and transmission on a vehicle dyno. The operation of the supercharger was then checked with a full quality control inspection. Each vehicle was signed off and an individually-numbered identification plate was attached to the car. The details of each individual vehicle were logged into the Sprintex database, which included the chassis identification number. Each owner's manual included an addendum identifying the warranty and maintenance requirements of the vehicle, reinforcing specific engine oil and fuel

requirements. All ZT 220S models were then supplied to authorized MG Rover dealerships around the country. The vehicles were covered by a 3-year/100,000 km warranty. The kit added an extra \$9,900 to the new-car price of the ZT 220S, making the car retail in 2004 at a fairly steep \$69,890. The model was officially launched at The Melbourne International Motor Show on 27 March, 2004.

In July, 2004, Michael De Vriendt, then Managing Director of MG Rover Australia commented:

'The standard ZT ... is an outstanding car, with very good power delivery combined with magnificent handling characteristics. With its well-regarded chassis dynamics, we felt there was a tremendous opportunity to further enhance the vehicle's overall performance.

The Sprintex Supercharge development programme has allowed us to do this. Not only has power and performance been improved, (but) overall acceleration has been enhanced. The ZT220S manual will reach 100 km/h from a standing start in approximately 7.1 seconds, on par with other European sports sedans that retail at higher costs. The automatic will be able to meet this same milestone in approximately 8.3 seconds.'

Initial details were as follows for the 220S:

Configuration: Rover KV6

Displacement: 2.497 litre / 152.4 c.i.

Bore/stroke: 80.0mm (3.1inch) / 82.8 (3.3inch)

Valvetrain: 4 valve / cylinder, DOHC

Fuel feed: Fuel injection

Aspiration: Sprintex Supercharger Power: 221bhp / 165 kw @ 6400 rpm Torque: 288 Nm / 212 ft lbs @ 4100 rpm

BHP/litre: 89 bhp/litre



When released for sale in September, 2004, early buyers reported them to be 'awesome' and one such new owner claimed to have done 0-100kms in <u>6.8</u> seconds, although he maintained that he had to *push the car hard*! Surprisingly, motoring journalists seem to have been given very limited access to test vehicles at the time. This seems a little odd, in view of the fact that MG Rover would probably want to show-off their new product. Journo Bruce Newton however, did manage a brief, twenty-minute drive through the Hunter Valley, New South Wales in August, 2004. His overall impressions were that the car's 'raw edge' would appeal to many drivers. The ride was 'firm, but not uncomfortable', was his opinion. Of the upgrade, he made these comments:

"... add the supercharger and there's a whole new character and urgency injected. It's a logical stepping stone in terms of both price and performance between ZT 190 and ZT 260. It's not overwhelming, but it is quick. Capable of whistling (and I do mean whistle. It's a noise that's constantly with you) up to reasonable speeds very quickly. For traffic cut and thrust and overtaking ability it's a big leap ahead of the normally-aspirated car."

And so, they went on sale. However, following the collapse of MG Rover in April 2005, no new 'Zeds' were being imported into Australia at all and this would ultimately mean the end for the factory-fitted Sprintex cars and the demise of the 220S as an altogether different ZT.

Now, fast-forward to 2011-12. On the car market as used cars, like all modern MGs and Rovers, they have bottomed-out with even reasonably low-kilometre examples only bring around \$15,000 to \$17,000. This may actually be quite appealing now, particularly if a potential buyer just couldn't afford the luxury price tag back in 2004-5. Some nice examples do surface on the used car market today along with a few sadly neglected vehicles. But be wary. Many are approaching the 200,000 km range and beyond, and this should be taken into account when buying second-hand. Also of real concern is that spare parts from Sprintex are no longer available and no replacement supercharger is available should problems occur. These concerns seem to resonate with any potential buyers here. Therefore when considering buying a 220S today, it is most definitely, *caveat emptor* – let the buyer beware!

## Footnote:

No statistics involving specific numbers of ZTs and ZT-Ts converted by A.A.C. and/or a breakdown of figures relating to numbers of saloons/estates, manuals/automatics, colours, options, distribution and sales details from around the country, are available at this stage.

References:

www.autoweb.com.au

www.webwombat.com.au

Thanks to: Andrew Regens, Mike Tata, Miles Winchester, Graeme Oxley.