

breakin' the blues



If you have a V6 powered Commodore and are getting bored with the power limitations then this solution will help you shake off the horsepower blues.

While the V6 engine revs like a two-stroke and makes a surprising amount of torque for such a small engine it is no ground pounder. When the great aspirations of higher fuel economy become a distant memory and the desire for more shove between the shoulders becomes too much to contain then consider this Vortech supercharger and custom intercooler designed and fitted by Mark's Workshop (MWS), in York, to transform the behaviour of even the most mild-mannered bent six.

Mark, from MWS, began with a brand new VT supercharged bottom end. Holden have spent the money developing the components so why re-invent the wheel? Added to this were a set of VS cylinder heads, ported by COME Racing. It is important to note that the rest of the engine is standard. The intake manifold, rockers, lifters and even camshaft all have GMH part numbers stamped on them.

Breathing new life into the 3.8 is a Vortech V2 S-trim supercharger which pumps around 14 psi of boost through the custom made air-to-air front-mounted intercooler. Modified extractors lead into a single 3-inch mandrel exhaust system to provide the necessary relief for all those compressed gases.

The standard Delco computer was then re-tuned using Kalmaker to provide the correct air/fuel ratios and ignition maps when the engine is under boost. Retaining the standard computer not only ensures smooth running under normal driving conditions but it also further reduces the cost of the project.

In order to make the rest of the driveline live behind such a potent engine, the automatic transmission was rebuilt with high performance components; while the diff was treated to a new set of 3.45 gears and a tightly-shimmed LSD.

On dyno the power gains were obvious. In standard form the best the car could muster was 143hp at the wheels. With the supercharger fitted the new peak power level soared to 308hp at the wheels – through the automatic! That is more than double the original output and is the kind of power you would expect from a modified 355 V8. On Mark's secret test track, the car accelerated faster than any standard GTS or XR6 Turbo he has tested. Mark also mentioned that traction was now an issue, this is certainly not a problem that confronts many V6 Commodore owners.

So, if you want to break the V6 blues then just apply some pressure in the right place.

Source:
Mark's Workshop.
9641-2305.

