



VEHICLE TEST

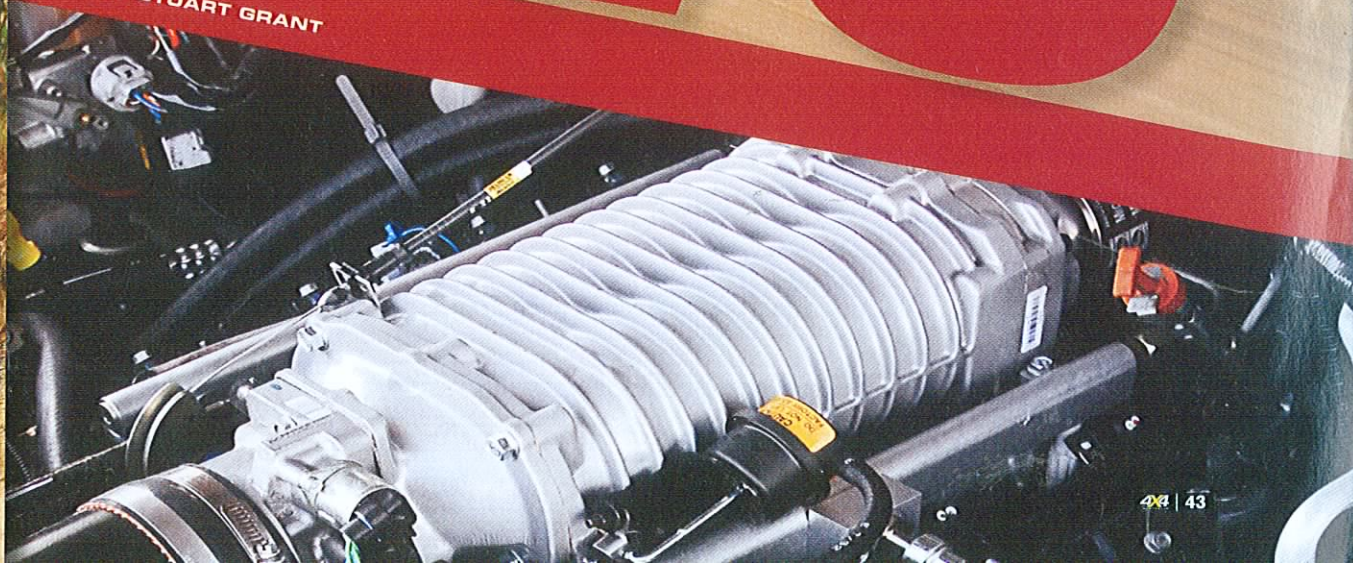
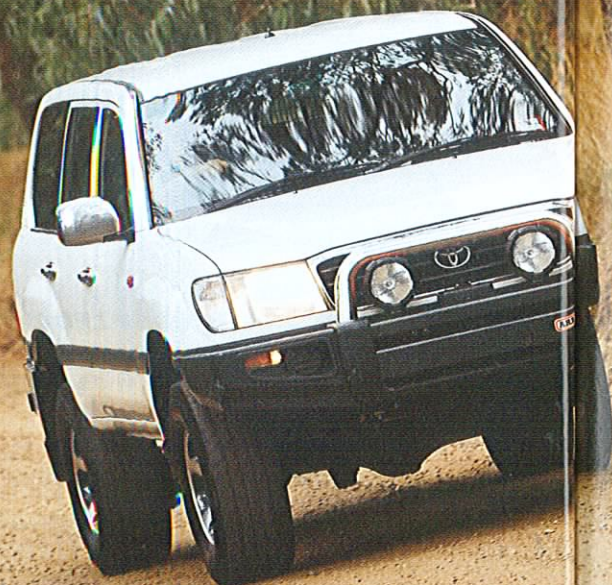
Marks Adaptors' V8 LandCruiser

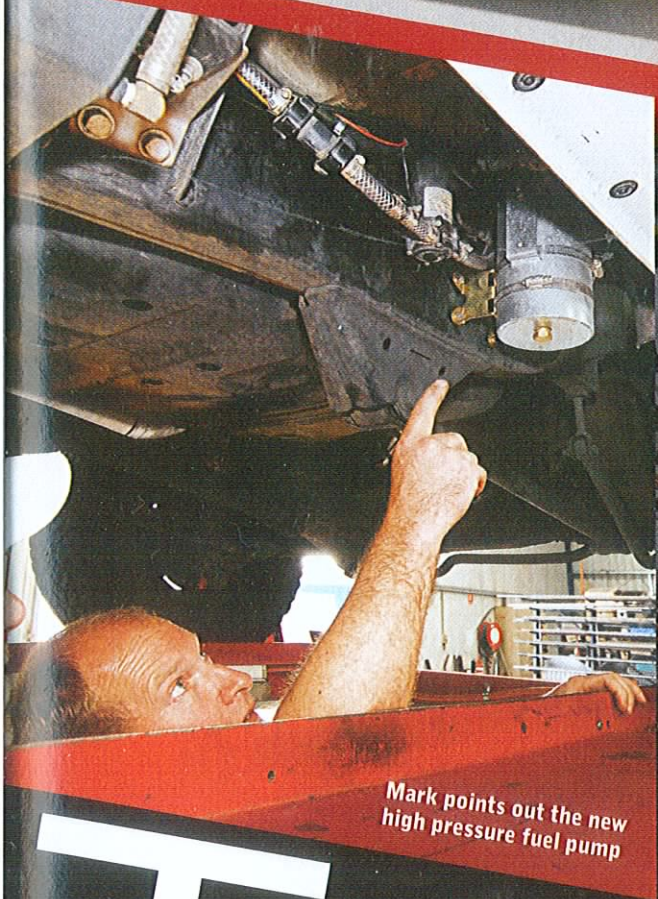


Not all V8-powered LandCruisers are created equal. **RON MOON** checks out a 100 Series that has more poke than most thanks to Marks 4WD Adaptors

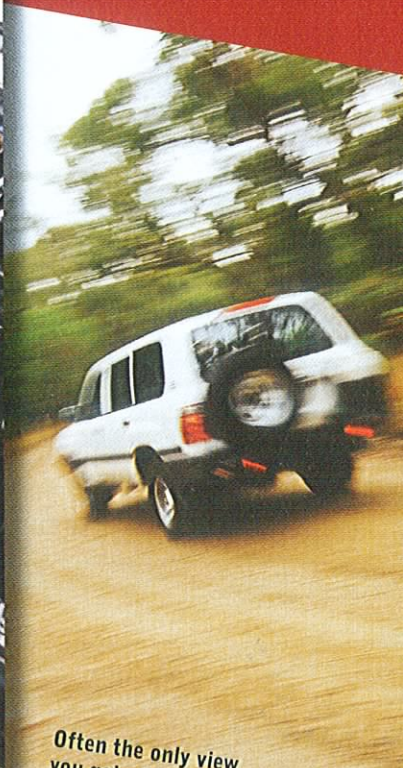
SUPER **V8** CRUISER

PICS BY STUART GRANT





Mark points out the new high pressure fuel pump



Often the only view you get of this Cruiser

ouch the throttle and this V8 100 Series LandCruiser growls and leaps away, leaving its poorer siblings in a cloud of dust.

Not content to just fit a 2004 Gen III, 5.7-litre V8 - 235kW and 460Nm - in this Cruiser the owner Jim decided a PWR LS1 Stage 1 Supercharger was necessary. This new positive-displacement blower is designed to keep engines coming from GM.

With the Stage 1 modified blower helping the engine produce, nominally, 370kW of power and 630Nm of torque at the flywheel, the kit includes a liquid-to-air intercooler that mounts in front of the OE radiator. Combine this with the patented alloy manifold unit and the unique integral bypass valves and you can get power and torque

increases of between 60 and 70 percent throughout the engine's power curve. That's a huge leap from the standard petrol-six's 158kW and 375Nm.

The standard four-speed auto was modified by Wholesale Auto Transmissions to provide a firmer shift pattern and the ability to lock up the torque converter in any gear. This is activated via a switch on the front of the gear-shift lever and helps on steep descents off-road.

Bolting the new engine to the auto demanded a gearbox adaptor kit and an engine mount kit. This allowed the engine to be moved 60mm to bring it as close as practical to the radiator.

The GM engine's computer, fuses and relays were tucked into one corner of the engine bay while a new wiring loom was fitted to get the engine and gearbox 'talking' to each other.

Mark French, of Marks 4WD Adaptors, designed, manufactured and wired

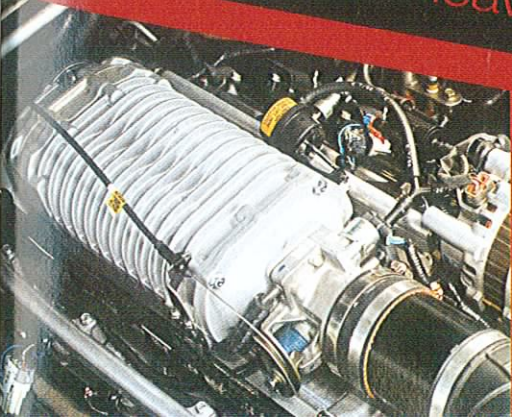
a Power Control Interface unit into the hybrid system. The cruise control was also modified so the standard Cruiser set-up would work with the new engine.

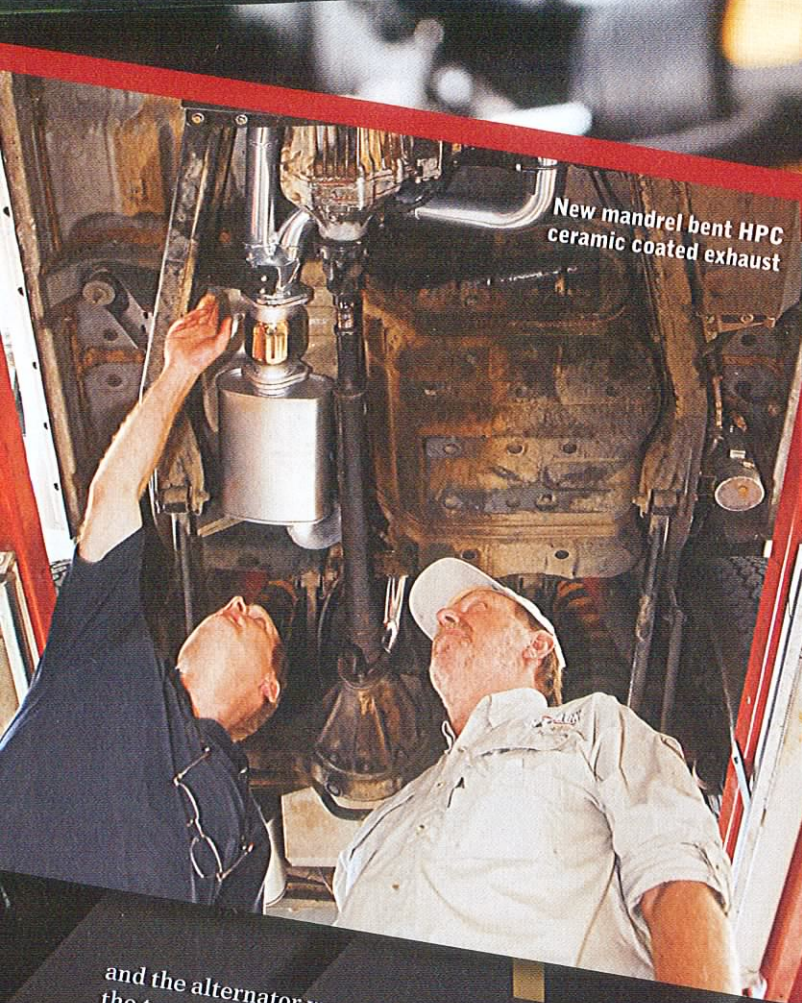
To improve engine monitoring, Jim also wired a ScanGauge II trip computer into the engine's Power Control Module. The ScanGauge II monitors coolant temperature, fuel used, intake air temperature, manifold air pressure, ignition timing, engine load and more.

A new set of headers and a three-inch mandrel-bent exhaust improve the engine's breathing. The complete exhaust system was HPC ceramic-coated to reduce radiant heat inside the engine bay and the cabin's footwell. To improve engine cooling the standard radiator was filled with Total Fill 115 Race Coolant from Liquid Intelligence.

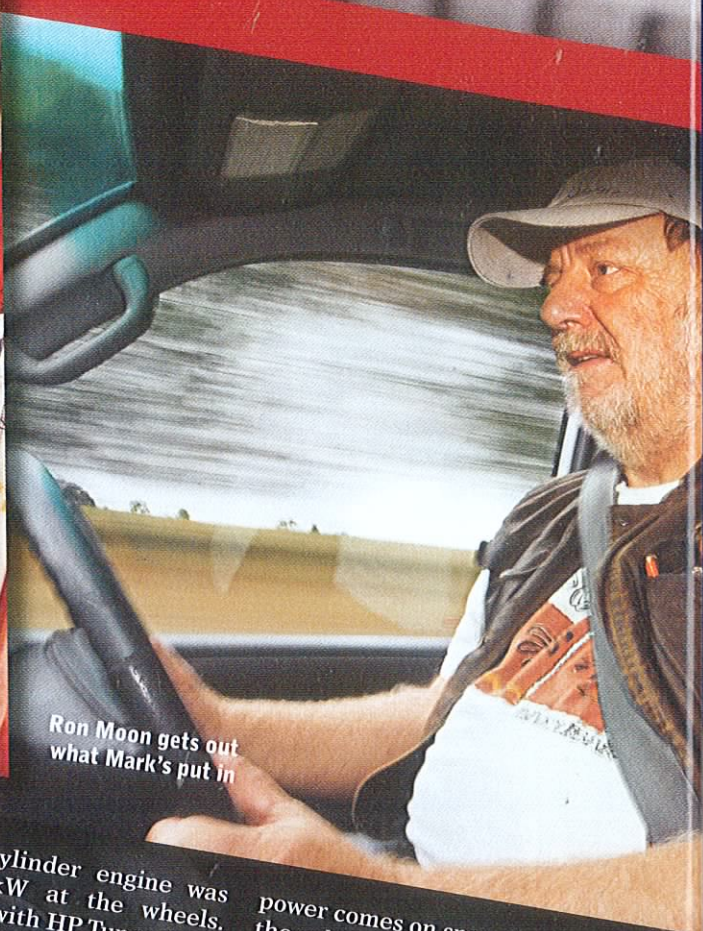
To fit the engine as low as possible between the chassis rails, the air conditioner compressor had to be modified

This 100 leaves standard V8 siblings in its dust





New mandrel bent HPC ceramic coated exhaust



Ron Moon gets out what Mark's put in

and the alternator was shifted to up near the top of the engine.

A Chevy truck engine sump was added but this had to be cut and shaped to fit above the front axle. An engine driven radiator fan was fitted requiring a new shroud and water pump pulley.

A new header tank for the intercooler's radiator was manufactured and fitted, while an extra high pressure fuel pump was added in the main fuel line, so that the correct fuel pressure required for the Gen III could be attained. The original fuel pumps located in the tanks are still used. Finally, the standard Toyota air cleaner and flange was modified to fit the ducting required for the GM engine.

It is a very tidy installation which has demanded many hours of work, research and manufacture but, now the installation and adaptor kits have been produced a similar power boost will have a much easier time of it.

Under test on a four-wheel dyno the

Cruiser's old six cylinder engine was producing just 81kW at the wheels. After tuning the V8 with HP Tuners' specially developed software, the GM powered Cruiser was developing 355kW at 5900rpm and 635Nm at 4300rpm with a whopping 222kW at the wheels. Tractive effort is an incredible 7300 Newtons.

So what's it like to drive? Put simply, it's a rocketship! A gentle right foot is the only thing that keeps the Cruiser within the speed limit while it absolutely eats hills and tows heavy loads that would slow lesser beasts. There's no hint of harshness nor anything brutal about power delivery;

power comes on smoothly, albeit quickly, the vehicle responds beautifully and the auto shifts sweetly.

Fuel economy is a vexed question. Driven sedately you could expect 15-16L/100km but, driven with gusto and heavily loaded, you could be drinking more than 20L/100km. And who, after going to all this expense and trouble, would want to drive such a rig sedately?

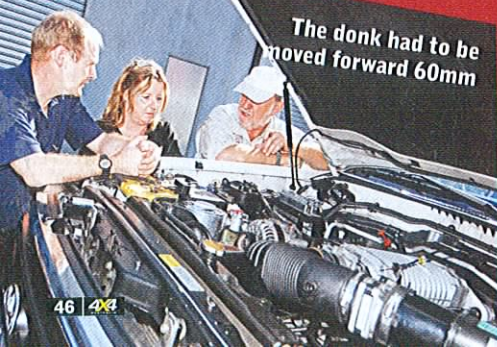
Marks 4WD Adaptors has all the kits for this popular installation. You'll need to be talented to tackle this job on your own, but most good 4X4 service centres will be able to do it for you. **44**

SUPPLIES

■ Marks 4WD Adaptors, Ph: 03 9702 7366 or go to marks4wd.com
Wholesale Automatic Transmissions, automatictransmission.com.au
PWR Performance Products, pwr.com.au
Radiator coolant products, liquidintelligence.com.au/index.html
ScanGauge II, scangauge.com
HP Tuners, hptuners.com

So what is it like to drive? A rocketship!

V8



The donk had to be moved forward 60mm

