

Nolathane now has a complete range of suspension upgrades for VE Commodores

Aftermarket suspension specialists, Redranger (the makers of Nolathane), says Holden's "Billion Dollar Baby", the VE Commodore, is in general a fantastic new design from the earlier model's suspension platform. Although, with such a wide customer demographic it comes with some compromises from vehicle handling dynamics to suspension component quality.

This is good news for the aftermarket as there is a lot of potential for improvements for the vehicle enthusiast, the company adds.

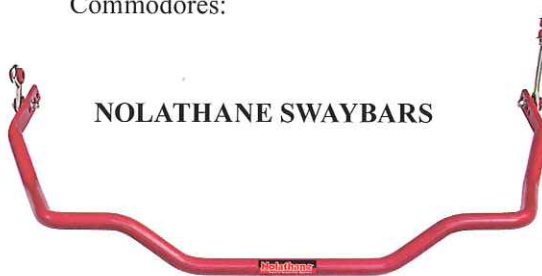
The high ride-height and roll-angle combined with soft springs and shock absorbers make for a very comfortable ride, says Nolathane, however, being a large family sedan this is fine for driving to the shops but inappropriate for any kind of spirited driving.

"Steering feedback to the driver is suppressed via hydraulic radius rod bushes and voided rear cradle mounting bushes," says Nolathane product manager, Jason Oltmanns, "and the car in general feels heavily insulated. When driving at moderate speeds on twisty roads, there is a long delay between steering input and the time when the car reacts, which is out of sync with the driver and the road. The combination of soft cross-member bushing, poor dampening and low roll resistance in the rear adds to the very sloppy ride, resulting in uncontrolled cyclic roll and pitch motions.

"Although the completely new design does bring some welcomed improvements, particularly to the front-end, it is not without its problems. The longer wheelbase and wide track gives a much better weight distribution with

smaller over-hangs, which noticeably improves turn-in and directional change compared to previous models. As a result of the new front suspension geometry, it feels as though the front-end has crisper turn-in and high stability, if not even to the point of over-sensitive steering that was out of tune with the sloppy and uncontrolled rear-end."

Nolathane lists the following solutions that it has developed to improve the handling and ride of VE Commodores:



NOLATHANE SWAYBARS

The best bang for your buck and biggest handling improvement to the VE Commodore is by fitting front and rear Nolathane swaybars to the vehicle, the company says. Adjustable versions for the front and rear are recommended as this allows each driver to quickly and easily change the under/over-steer balance. By stabilising excessive body roll and suspension movement, cornering loads are spread more evenly across the tyres. Comfort improves



NOLATHANE STRUT BRACE

because the car sits flatter through bends, so a Nolathane swaybar will make the suspension system deliver more grip, improved tyre wear as the tyres remain more upright and stay flatter on the road. This makes the car

more responsive, while delivering more grip without reducing comfort, says Nolathane.

FRONT KITS

Nolathane says it currently has in development a solution for allowing further camber adjustment as the front camber adjustment using the vehicle's factory



45572 castor lock washers.



Inner control arm mounting slots which allows slippage and caster setting changes. Nolathane 45572 kits prevent this movement.

adjustment on VE Commodores is limited to approximately -1.75 degrees. High compliance bushings are available for all mounting points and these improve the handling and responsiveness of the vehicle. Nolathane's castor lock washer kit #45572 positively locks the vehicles castor to a more desired setting.

Nolathane says its polished alloy front strut brace #44468 does more than just look pretty. Like previous versions of the Commodore it helps on the VE just as much by tying together the front-end and reducing any unwanted chassis flex.



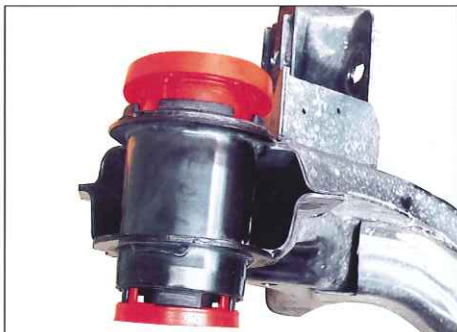
Nolathane's VE Commodore test-car during one of its many testing days to develop its suspension parts and collect research data, to ensure all parts are street, track, and race proven.

REAR KITS

High compliance factory installed bushings used throughout the car, and in particular the rear cross-member to chassis mounts, made the car very dull and unresponsive, says Nolathane. And this was addressed by installing



Nolathane kit 49169 fits into the original bush voiding to remove unwanted and uncontrolled movement.



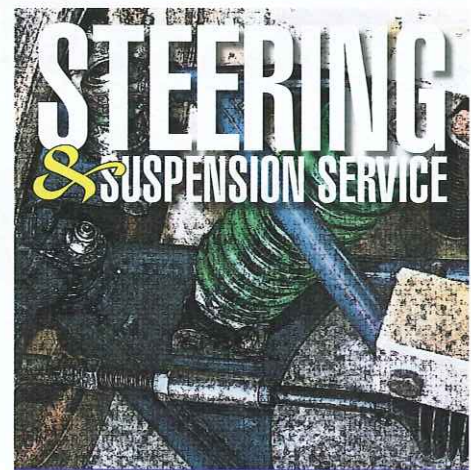
Nolathane kit 49169 fitted to the original rear cross member.

Nolathane #49169 rear cross-member urethane inserts. These inserts fit into the voiding of the original bush which greatly reduces the disconnection between the rear suspension and the chassis without any noticeable detrimental effect to comfort.

The chassis mounting point of the rear-toe adjustable arm is located inside a long horizontal slot that allows for 14mm of lateral movement. Moving this point affects the bump steer, so it is critical that it is positively located and locked in the desired position, says Nolathane. This was achieved by fitting Nolathane's rear bump-steer correction kit #46268 which utilises specially designed locating washers to positively lock the rear toe settings.

Due to the above modifications putting extra load on the suspension pivots, critical areas such as front lower control arm and radius rod bushing were upgraded using new low compliance polyurethane replacements. But again, a lot of emphasis was put on retaining factory comfort level and articulation characteristics, says Nolathane. Rear anti-squat bushes may also be an area for improvement, with initial measurements already conducted but Nolathane says further testing of its latest designs are required before this part becomes available.

Designed to integrate and provide a fully balanced handling solution, Nolathane suspension offers bushes, swaybars and alignment products. For a catalogue, brochure or technical information on the new VE Commodore range or any of the Nolathane products, contact the Redranger team on 1300 882355 or visit www.nolathane.com.au



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