

# HOLDEN TORQUE



Magazine of the Holden Sporting Car Club of Victoria

August 2018



Photo of Mal Caldwell's "Galant Rocket" tearing up the tarmac at Toyota Altona Motorkhana event on Sunday 29<sup>th</sup> July!

## Our valued sponsors



## Next Club Event

Martin's Cruise to Noojee on Sunday 9<sup>th</sup> September.

## What's new in this edition?

Report - HSCCV General meeting at Shannons Auction House – 9<sup>th</sup> July

Report – Winton Festival of Speed 4<sup>th</sup>/5<sup>th</sup> August.

Holden Commodore VB to VF, 40 years of evolution

# HOLDEN TORQUE - August 2018

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### Magazine

Articles and advertisements to be published in the magazine can be submitted via e-mail to the Editor at [editor@holdenclub.com](mailto:editor@holdenclub.com). Microsoft Word format is preferred for text, pictures as jpg (no larger than 1200x900).

Each months items must be received before print night (refer Calendar). Quarter page ads are free to members.

Advertising is otherwise charged at \$10 - quarter page, \$20 - half page, \$35 - full page per edition

### Website

Why not visit our website? Find us at: [www.holdenclub.com](http://www.holdenclub.com) for more information on the club or up to date information on our various events.

### Club Meetings

Refer to Calendar for next club meeting. All members, friends and new visitors are very welcome.

### Correspondence

All should be addressed to:	The Secretary, Holden Sporting Car Club of Victoria Inc, Po Box 282 Chirnside Park Victoria 3116,
or via email to:	<a href="mailto:secretary@holdenclub.com">secretary@holdenclub.com</a>

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# HOLDEN TORQUE - August 2018

## Event Calendar

### July 2018

7:00 pm Club meeting at Shannon's 40 Corporate Drive Heatherton  
Pizzas supplied  
Viewing of cars available.

### August

**Saturday 22<sup>nd</sup> August** HSCCV Sprint / Come & Try Day at Sandown Raceway, starts at 8AM.  
Volunteers needed please! Email [president@holdenclub.com](mailto:president@holdenclub.com) for more details.



### September

**Sunday 9<sup>th</sup> September** - Martin's Cruise to Noojee. Meet at 9:30AM at the rear car park of the Hallam Hotel, 241 Princess Highway Hallam. Please email [darrensmcgrath@gmail.com](mailto:darrensmcgrath@gmail.com) for more details!

**Expressions of interest – Go Karting day later this year** – Please register your interest by email to [darrensmcgrath@gmail.com](mailto:darrensmcgrath@gmail.com)

## HOLDEN TORQUE - August 2018

### HSCCV General Meeting Shannons 9<sup>th</sup> July

What a great turnout for our general meeting a week before a fantastic auction of fine vehicles at the new Shannons Auction House facility.

Starting our night with a leisurely stroll through the collection of motoring finery saw most of us wondering if the fund's would stretch far enough to purchase our dream car. I must say the two door left hand drive rx2 caught my fancy and sold the next week for just under \$40,000.

After drooling over the two chargers that were on offer we settled in for pizza in the board room. With full bellies the grand Poobah Bruce opened the formalities and we had introductions from new and prospective members.

A few newbies with much to offer. Many thanks to the wonderful staff at Shannons for allowing clubs to make the most of the fantastic venue they have. Thanks to club members and friends who came along to enjoy the night. If anyone has any ideas for other interesting venues to meet and discuss club business drop us a email or call. Here's some photos of the night.

Thanks Darren McGrath.





# **HOLDEN TORQUE - August 2018**

## **Presidents Report – Bruce Lethborg**

Hi fellow members,

Coming up is our sprint and come and try day at Sandown on Saturday 22nd September. We will be needing volunteer helpers to do flag points, scrutineering, pit lane check in and the most important one of all.... The BBQ. Yes we have changed the time of the event to see if the weather gods will be kinder to us, so keep the date free, support your club and give us a hand. Please email me on [president@holdenclub.com](mailto:president@holdenclub.com) or phone 0499 272 774.

Remember,.....keep it on the black stuff

**Cheers Bruce**

# HOLDEN TORQUE - August 2018

## Secretary Report – Winton Festival of Speed

The Winton Festival of Speed is a historic race meeting that was held on August 4-5<sup>th</sup>. It is run by the Victorian Historic Racing Register under the presidency of former HDT mechanic Ian Tate and has more of an emphasis on Touring Cars and Sports Cars than most historic events.

This year it featured an event called Torana Magic which involved static displays and laps of the track by at least 50 Toranas each day before the racing started. As my XU-1 was also a part of the Shannons Parade at lunchtime I did more laps than some of the competitors.



The racing was fantastic especially the Touring Car races with the three races being won by a Torana, a Mustang and a Charger. The sports cars featured David and Goliath contests between little Clubmans and big Corvettes. All in all a great event.

**Phil Slater**

## Holden Commodore VB to VF, 40 years of evolution



From humble beginnings as the VB Commodore in 1978 initially produced in GMH's Dandenong Factory to the very last iconic Red VF Series II Redline Commodore rolling off GMH's Elizabeth plant on October 2017 there would be very few Australian families that would not have driven or ridden in one, owned one, conceived in one, or perhaps been carried home from maternity hospital in one!

Back in the late 1970's the popular HZ Kingswood and Premier were considered by Holden to be too thirsty on fuel, spurred on by an a global oil crises and spiralling costs. The Statesman and Caprice Long wheelbase variants lived on being produced until 1984 on facelifted HZ architecture as the WB.

Given Ford also had a strong and loyal following with fleet and taxi customers and the debut of their highly successful XD Falcon in 1978 that offered more passenger room, and performance while still achieving good fuel economy. It was deemed by some to be a premature demise of the Kingswood that was Holden's spacious and powerful family car which showed with early Commodore sales not overtaking those of Ford's Falcon of the day.

### 1<sup>st</sup> Generation Commodores VB to VL (1978 to 1988)

#### VB (1978-1980):



This very first Commodore's design was a modified Open Reckord from Germany. Holden engineers did various tweaks to make it suitable for Australian conditions such as changes to suspension tune, strengthened firewall (Opel Reckord was apparently too weak for our harsh Australian Roads!) Development cost for this first model was reported to be \$110 million. A wagon variant was also introduced in 1979 however had some teething issues with build quality due to different sheet metal.

The car came in base (unbadged), SL, and top spec SL/E with velour trim and electric windows. The engine choices were the Red 6 cylinder 2.85L 161 (64KW @4000 RPM / 198NM @2200 RPM), 3.3L 161 6 Cylinder (71kw@3600 RPM / 221NM @2000 RPM), 4.2L 253 V8 (87KW @ 4000RPM /

271NM @2000RPM), 5L 308 V8 (114KW@4000 RPM / 344 NM@2200 RPM) and a 3 speed automatic or 4 speed manual gearbox.

### **VC (1980-1981):**



The VC saw only minor changes as “XT5” engine specification, leaving just the blue painted straight sixes and Holden V8’s, and retiring the Red unit that served Holden since the 1963 EH. Electronic ignition was offered on the V8 engine and the six cylinder engine some tweaks on carburettor, inlet and exhaust manifolds to improve performance and drivability. A 4 cylinder 1.9 litre engine named the Starfire (basically a Holden 6 cylinder engine with two cylinders removed), however soon developed a reputation for being under powered and thirsty because it had to be worked hard to get any useful performance out of it’s modest 58 kilowatt / 78 horsepower and 140 NM of torque. Holden introduced a manifold vacuum gauge in place of the tachometer that could be optioned back with the sports instrumentation package.

Only minor visual changes such as the “egg crate” grille and embossment of model badging into side running strips.

### **VH (1981-1984):**



Introduced in September 1981 the front radiator grille was modified again to a simplified louvered design first introduced on the VB. Reshaped head lamps and tail lamps with a louvered design (similar to Mercedes Benz at the time) were allegedly better at repelling dust to maintain their usefulness.

Mechanically things did not change much except for the introduction of a 5 speed manual gearbox optional on 2.85L six and 1.9L four cylinder engines. Both of the aforementioned engines were refined to improve performance and fuel economy. The first performance variant the SS (a badge last used on the HQ) was offered with a choice of a 4.2L and 5.0L V8 engine mated to a four speed manual gearbox.

## VK (1984-1986)



This was Holdens first major change since VB, with a six window glasshouse design, the 3.3 Blue straight six engine was revised featuring a computer controlled ignition on the carburettor model and Bosch electronic fuel injection offered for the first time boosting power to 106KW. The 5.0L 308 V8 engine continued on in high performance models, however interestingly shrunk from 5044cc to 4987cc to comply with CAMS Group A homologation rules. The 2.85L six and 4.2L V8 were discontinued along with the 1.9L Starfire 4 (except New Zealand).

The Calais name plate was introduced for the first time to replace the SL/E model and featured a “digital dashboard” that would have looked futuristic for its time. Ford followed suit with the XF Fairmont Ghia.

VK Calais Digital Dashboard



XF Ford Falcon Digital Dashboard.



### VL (1986-1988)

This model set sales records for Holden, finally overtaking Ford Falcon sales. Smoothing of the outer body lines further distanced this model from its Opel ancestor. The Calais luxury model (introduced in VK). Due to tightening emissions regulations and the introduction of Unleaded Petrol in 1986 Holdens ageing 6 cylinder power mill unfortunately did not cut the mustard. Instead Holden signed a supply contract with Nissan to import their 6 cylinder RB30E engine. This seemed like a good idea back in 1983 when the Australian Dollar was strong, however by 1986 this wasn't the case. However despite some controversy, reports emerged this then new Commodore has 33% more power (116KW) and 15% better fuel economy over the VK's black straight six. An optional Turbocharger at the time boosting power to 150 kilowatts. The main design fault of this model was a awkward packaging under the hood that meant the cooling system did not work as well as designed in the Nissan Skyline leading to overheating problems and cracked cylinder heads.

The VL saw the introduction of the then new Berlina name plate, a luxury oriented model that slotted in between the Executive and Calais models that stuck until the VE series.



## 2<sup>nd</sup> Generation Commodores VN to VS (1988 to 1996)

### VN (1988-1991)

This model borrowed again from Opel based on the larger Opel Senator B and new Opel Omega A, however Holden widened and stretched the floor pan to match its arch rival Ford Falcon for size. Due to budget resource limitations some compromises were made carrying over VL chassis componentry to save costs. For the first time in Commodore history a long wheelbase Statesman and Caprice (codename VQ) made a comeback to compete with Ford's popular Fairlane models. In 1990 for the first time a utility variant was offered (codename VG). Interestingly the station wagon variant was also based on the Statesman long wheelbase platform.

Due to unfavourable Yen and Australian dollar exchange rates, Holden was forced to ditch the Nissan 6 cylinder engine used in the VL range. Instead Holden manufactured locally its own 3.8L V6 based on a well proven Buick design, adapting it for RWD. The 5.0 litre V8 that made an appearance late in the VL range was offered in 165 Kilowatt guise by means of multi point fuel injection. The V6 was considered rough, however was praised for its rapid pickup and frugal fuel economy in its day with 125 kilowatts on offer. In 1989 a revised V6 offered 127 Kilowatts.

The VN also was sold as a badge engineered Toyota Lexcen courtesy of the John Button Government plan to boost the Australian Car industry by having model sharing agreements between Toyota, Holden, Nissan and Ford / Mazda.



### VP (1991-1993)

The VP of 1991 featured some small cosmetic changes such as an acrylic grille and mechanical refinements on the V6 engine, with carry over 5.0L V8. A new wider track front end was introduced to address road handling issues with the VL chassis components. In August 1992 anti lock brakes (ABS) was offered for the first time on Calais and SS models, later becoming optional across the Series II Range. The Toyota Lexcen T2 (right photo) was also introduced with extra styling differentiation from the Commodore, however was discontinued in 1997 when the badge engineering agreement with Toyota ceased.



### **VR (1993-1995)**

The 1993 VR was a major facelift of Holdens Second generation Commodore, carrying over only door and roof sheet metal, with approximately 80% changes. Body lines were smoother, introduction of a twin kidney grille that stayed until the VY series. The rear end sported new raised tail lights apparently for safety reasons and a drivers side airbag was introduced for the first time (an Australian car first). A GM 4L60-E electronic 4 speed automatic transmission, IRS (independent rear suspension), anti-lock brakes and cruise control were standard on the new safety oriented Acclaim model. This focus on safety boosted this models safety rating over the previous VN/VP models providing a “better than average” level of occupant protection. The series II model introduced audible warning chimes for handbrake and low fuel levels amongst some other small changes. In late model VR’s a revised Buick 3.8L V6 featured rolling element bearings in the valve rocker arms and increased compression ratios for improved refinement and performance.



### **VS (1995-1997)**

This model was a minor revision of the VR as a stopgap sales booster until the arrival of the all new VT Commodore. A revised Ecotec V6 that had slightly improved performance and better emissions compliance and was mated to a revised GL 4L60-E automatic transmission that had smoother gear changes. The Series II model introduced elliptical side indicator turn signals, some interior tweaks and a supercharged V6 engine option on selected models. The Supercharged V6 was good for 165 KW slotting between the normal V6 and V8 engines with only 3kw less power than the V8!. The last of the Toyota Lexcens were produced in 1997.

## Third Generation VT to VZ (1997 to 2006)

### VT (1997-2000)

The VT-VZ series is the last Australian built Commodore to be based on Opel Omega architecture. However once again Holden customised the Opel design to give it an Australian flavour with revised width and mechanicals. This model spawned a new generation of Statesman and Caprice Long Wheelbase models which the wagons shared the same wheelbase / platform. The Generation 2 Monaro from the 1960's and 1970's also made a comeback later in in this third generation platform.

The VT introduced semi trailing independent rear suspension as standard across the range which was more advanced than it's arch rival Ford Falcon at the time. Electronic traction control also available for the first time. Early VT's suffered from excessive tyre wear due to distorted suspension camber angle (exacerbated by towing and undulated surfaces) caused by missing toe control links that were instated in the Series II VT to correct this. Interestingly HSV variants had the toe control link on the flagship GTS 300 model from day one. Holdens long serving 5.0L 308 V8 was retired in favour of an LS1 Chevrolet 5.8L Generation III V8 starting life at 220KW tune. The Supercharged V6 was tweaked to give 171 KW. Side airbags were on offer for the first time as an option on Acclaim and higher spec models. This model earned Holden Commodore it's fourth Wheels Car of the Year Award and became the best selling Commodore to date.

The sedan and wang range started off with the Commodore Executive (base fleet model), Commodore Acclaim (family and safety oriented model), Berlina (luxury), Calais (sport luxury). A Limited Edition "Sydney 2000" Olympic version and Holden 50<sup>th</sup> Anniversary model came with extra trimmings over the base Executive model.



**VX (2000-2002):**

The VX Update featured new headlamp and tail lamp designs. An updated VU utility was released. The series II update launched in early 2002, correcting the VT's suspension camber flaw by adding to control links that were part of the original Open Omega B design. The VX series also saw the reintroduction of the Holden Monaro with plans to export to US as a Pontiac GTO. Safety in the VX was enhanced with Bosch 5.3 anti-lock brakes standard across the range, and traction control on manual transmission vehicles. B pillars were modified to improve side impact collision and side impact airbags also became an option.



## VY (2002-2004)

Holden invested \$250 million for this 2002 mid life cycle update marking the first major styling shift since the VT. The rounded front and rear styling was changed to more aggressive and angular lines. The curvy dashboard design was changed to a more angular design. Some tweaks to suspension and steering sharpened the cars handling response. The Generation III LS1 V8 engine was now tuned for 235kw and a new entry level SV8 model based on the Executive was offered to capture the market for low cost performance cars, based on the SS but without the bling.



The series II update added a front strut bar as standard equipment on the SS to increase front end rigidity to improve road handling. New wheels, trims and decals were the only other main changes with the Calais now having a more defined sport luxury personality than before leaving the Berlina as the entry level luxury option. The Holden Crewman sharing LWB Statesman / Caprice architecture was released as a 4 door utility. In 2003 Holden's answer to the developing SUV market invested \$125 million to develop it's own AWD system named Crosstrac. This car was named the Holden Adventra. This system was only available with the V8 and automatic transmission. Unfortunately this model was short lived due to smaller than expected sales volume.

Below – Holden Crewman utility (side view) and Adventra front and back.



VZ (2004-2007):

The VZ was the final revision of the third generation Commodore. It featured a new series of V6 engines named the Alloytec V6 3.6 litre starting at 175KW up to 190KW for the high output version. The Ecotechs were more arguably more powerful and fuel efficient than their Ecotec ancestor. A five speed 5L40E automatic transmission was offered on luxury V6 variants whilst base models carried over the old 4 speed automatic transmission. A new Aysin 6 speed manual was available on the SV6 / SS sports variant. In order to comply with stricter Euro III emission standards (also forcing a revision of the Alloytec V6) a new 6.0 litre Generation 4 LS2 V8 engine was introduced. The first release did not share cylinder deactivation (Active Fuel Management) and variable valve timing features that it's US counterpart did. As a first for Holden electronic stability control and brake assist became available.





## Fourth Generation (2006-2017)

### VE (2006-2013)

This was Holden's very first clean sheet designed Commodore that moved away from the Opel platform except for some carry over interior bits, switches for electric Windows, etc. Given the high public expectations of quality and Holden's export plans the budget for developing this car reportedly exceeded \$1 Billion. The new Holden developed platform was named the GM Zeta platform. Key hallmarks of the Zeta platform are more sophisticated independent suspension and near perfect 50:50 weight distribution and increased use of high strength steel for higher shell rigidity that gave the car sharper handling than its predecessors. A new 6 speed sports mode sequential shift 6L80-E automatic transmission was made available for the first time on V8 variants, with the 5 speed automatic being carried over for the higher spec V6 variants. The base models retained the old 4 speed automatic shifter and a new name plate Omega replaces the Executive nameplate. Innovative design features such as symmetrical centre console components, flush fitting hand brake lever meant the VE could be easily converted from right hand drive to left hand drive for overseas export markets. Internationally the Commodore is badge engineered as Chevrolet Lumina, Chevrolet Omega or a Pontiac G8 in the US (discontinued in 2010 along with Pontiac brand). The first models in the VE platform to be released were the Sedan, and WM series Statesman and Caprice LWB variants. A VE ute was released in 2007 and in July 2008 a new Sports wagon shape to replace the old boxy wagon was introduced.

In September 2009 a MY10 update to the VE Commodore platform introduced a new entry level engine based that had direct fuel injection technology (injectors in the cylinders) called the 3.0 litre SIDI V6 (Spark Ignition Direct Injection) and a 3.6 litre version for all other V6 models. A new standard automatic transmission, the 6M 6L50 replaces the long serving four speed in Omega and Berlina models. A six speed manual could still be optioned in sports models. Rated fuel economy was

9.3L / 100KM / 190 kw which is more than the 3.6L Alloytec before it or the old Aussie 5.0L V8. The new 3.6L produces 210 KW and 350nm of torque and feels the stronger of the two when under load or carrying multiple passengers.

In mid 2010, Holden released the VE Series II. Changes included a new infotainment system called Holden iQ, a centre mounted LCD display providing Navision, Bluetooth streaming and controls to the stereo. There were also small alterations to interior styling and a number of other small changes.

Series I Commodore Below



Series I SS Interior below.



Series 1 Sportswagon below.



Series II SS interior below



VF (2013-2017)

The VF Commodore was a major redesign of the VE.

Major changes to body shell, electrics and suspension were done to reduce weight in an effort to improve fuel efficiency. Badge changes included deletion of the Berlina (Now just Calais) and Omega (replaced with Evoke) name plates. Calais V heads up the flagship sport luxury line available in V6 / V8 variants whilst an SS / SSV Redline round out the V8 performance offerings.

The interior design was a major refresh featuring reverse camera with cross traffic alert, park assist front and rear and a clever voice command driven infotainment system for changing radio stations, changing MP3 tracks, controlling Bluetooth / phone and even Navigation.

All cars feature electronic steering replacing the hydraulic steering pump used in VE and prior models making semi automatic perpendicular and parallel parking possible in all models via simple to read instructions on the centre driver information display and the driver modulating the accelerator and brake manually.

Other new features are an electronic parking brake and remote engine start from remote key fob feature to allow vehicle cabin to heat or cool depending on last climate control setting.

The \$100 million investment ensured this model was the most technology advanced Australian built car ever built and had a more modern interior design than the outgoing FGX whose interior design had not fundamentally changed in nearly a decade however arguably it's Insync 2 infotainment system was better than Holden's IQ system.

In late 2015 the very last VF Series II update was launched featuring minor styling revisions at the front, new tail lenses on Sportswagon and a 304 KW LS3 across the entire V8 range.

The very last VF Series II Commodore was a Red SSV Redline Sedan rolled off the production line on October 20<sup>th</sup> 2017. In March 2018 the fully imported from Germany Opel Insignia based replacement, named the ZB Commodore started to appear in Holden dealer show rooms. Sales have been lower than expected possibly due to controversy around retaining the Commodore nameplate for a car that is fundamentally very different to the VF Series II it replaces. There is no V8 in the range and entry level cars are FWD only starting with a 2 litre turbo 4 cylinder working up to a 3.6 litre V6 with all wheel drive. Another possibility is the uncertainty around the recent sale of Opel to PSA (Peugeot Citroen Alliance) and uncertainty around the Opel Insignia platform moving forward.

Series I SV6 Sportswagon



Series I SV6 / SS Interior



VF Series I Calais V and interior.



Series I VF utility

Series I VF Sportswagon.



Series II Sportswagon with revised tail lights:



**Information Source acknowledgements:**

Wikipedia.org

Google Images

My general knowledge of Commodores, especially VE/VF series as I am a proud owner of a 2008 WM Series I HSV Grange and 2013 VF Series 1 SV6 Sportswagon.

I hope you have enjoyed reading this article as much as I have putting it together for you.

Thomas