= Holden Commodore =

The Holden Commodore is a car manufactured since 1978 by Holden in Australia and , formerly , in New Zealand .

For the original model , Holden replaced the long @-@ serving Kingswood and Premier large cars developed in Australia , with another rear wheel drive (RWD) platform that was , however , based on a smaller European design by Opel , re @-@ engineered for Australian conditions . Subsequent series became larger , culminating with the fourth generation Commodore , fully developed in Australia and based on the GM Zeta platform .

Initially introduced as a single sedan body style , the range expanded in 1979 to include a station wagon . From 1984 , Holden began branding the flagship Commodore model as Holden Calais , with the Commodore Berlina introduced in 1984 gaining independent Holden Berlina nomenclature in 1988 . Long @-@ wheelbase Statesman / Caprice derivatives and Commodore utility body variants followed in 1990 . The third generation architecture spawned the most body styles , with a new Holden utility launched in 2000 (now officially as the Holden Ute) , reborn Monaro coupé in 2001 , four @-@ door Holden Crewman utility and all @-@ wheel drive (AWD) Holden Adventra crossover in 2003 . Holden Special Vehicles (HSV) in 1987 began official modification of high performance variants of the Commodore and its derivatives , under its own nameplate .

Rivalry came predominantly from the Ford Falcon ? also locally built . Prior to the second generation Commodore of 1988 , the Holden was positioned a full class below the full @-@ size Falcon . To varying degrees , competition also came from mid @-@ size offerings from Toyota Australia as well as Chrysler Australia , which morphed into Mitsubishi Motors Australia . Moreover , between 1989 and 1997 , Australian federal government policy saw the launch of the Toyota Lexcen , which was a rebadged version of the second generation Commodore . With the introduction of the third generation in 1997 , Holden implemented its largest export programs involving Commodore and its derivatives . In the Middle East , South Africa and Brazil , the Commodore sold as a Chevrolet . High @-@ performance export versions followed in North America , sold as Pontiac and later Chevrolet . HSV also exported to the United Kingdom as Vauxhall , in the Middle East as Chevrolet Special Vehicles (CSV) and in New Zealand and Singapore as HSV .

In December 2013 , Holden announced that it would cease its local production by 2017 committing , however , to use long @-@ standing Commodore nameplate on its fifth @-@ generation fully imported replacement , moving to a front @-@ wheel drive (FWD) platform .

= = First generation = =

= = = VB (1978 ? 1980) = = =

Introduced in October 1978 , the VB Commodore development covered a period with the effects of the 1973 oil crisis still being felt . Hence , when Holden decided to replace the successful full @-@ size HZ Kingswood with a new model line , they wanted the new car to be smaller and more fuel efficient . Originally , Holden looked at developing a new WA Kingswood , however , this project was later dismissed . With no replacement in development , Holden looked towards Opel for providing the foundations of the VB , basing it loosely on the four @-@ cylinder Rekord E bodyshell with the front grafted on from the Opel Senator A , both constructed using GM 's V @-@ body platform . This change was necessitated to accommodate the larger Holden six- and eight @-@ cylinder engines . Holden also adopted the name " Commodore " from Opel , which had been using the name since 1967 . Opel went on to use Holden 's Rekord @-@ Senator hybrid as a foundation for its new generation Commodore C , slotting in between the two donor models .

The VB series retained 96 percent of the preceding HZ Kingswood 's interior space , despite being 14 percent smaller in overall dimensions , although five percent larger than the Torana . With the Commodore dropping a full class below the Kingswood and its Ford Falcon competitor , the smaller Commodore was predictably more fuel @-@ efficient . This downsizing was first seen as a major

disadvantage for Holden , as they had effectively relinquished the potential of selling Commodores to the fleet and taxi industries . These sales losses were thought to be unrecoverable ; however , the 1979 energy crisis saw Australian oil prices rise by 140 percent , putting substantial strain on the automotive industry to collectively downsize , a change that Holden had already done .

During the VB 's development , Holden realised that when driven at speed over harsh Australian roads , the Rekord would effectively break in half at the firewall . This forced Holden to rework the entire car for local conditions , resulting in only 35 percent commonality with the Opel . The Rekord 's MacPherson strut front suspension was accordingly modified , and the recirculating ball steering was replaced with a rack and pinion type . These modifications blew development costs beyond expectations to a reported A $ 110 million ? a figure close to the cost of developing a new model independently . With such a large sum consumed by the VB development programme , Holden was left with insufficient finances to resource the development of a wagon variant . Added that the Commodore architecture was considered an unsuitable base for utility and long @-@ wheelbase models , Holden was left with only a sedan , albeit one in three levels of luxury : a base , SL , and SL / E. Desperate measures forced Holden to shape the Commodore front @-@ end to the rear of the Rekord wagon . As the wagon @-@ specific sheet metal had to be imported from Germany , the wagon , introduced in July 1979 , suffered from inevitable component differences from the sedan . Although infrequently criticised in the early years , quality problems were evident , with poor trim and panel fit problematic for all first generation Commodores . This coupled with mechanical dilemmas such as water pump failure and steering rack rattle ensured warranty claims were high in the first year . In face of these issues , VB was praised for its value for money and sophistication , especially in regards to the steering , ride quality , handling and brakes , thus securing the Wheels Car of the Year award for 1978 .

= = = VC (1980 ? 1981) = = =

The most significant change to the VC Commodore of March 1980 was the engine upgrading to " XT5 " specification . Now painted blue and thus known as the Blue straight @-@ sixes and Holden V8s , these replaced the Red units fitted to the VB and earlier cars . Changes included a new twelve @-@ port cylinder head , re @-@ designed combustion chambers , inlet and exhaust manifolds , a new two @-@ barrel carburettor and a Bosch electronic ignition system for the inline sixes . Tweaks and changes to the V8s surrounded the implementation of electronic ignition , revised cylinder head and inlet manifold design and the fitment of a four @-@ barrel carburettor on the 4 @.@ 2 @-@ litre variant . These changes brought improved efficiency , increased outputs and aided driveability . In response to increasing oil prices , a four @-@ cylinder variant was spawned in June 1980 . Displacing 1 @.@ 9 @-@ litres , this powerplant known as Starfire was effectively Holden 's existing straight @-@ six with two cylinders removed . The four 's peak power output of 58 kilowatts (78 hp) and torque rated at 140 newton metres (100 ft · lbf) meant its performance was compromised . Reports indicate that the need to push the engine hard to extract performance led to real @-@ world fuel consumption similar to the straight @-@ sixes .

Holden 's emphasis on fuel economy extended beyond powertrains , with a fuel consumption vacuum gauge replacing the tachometer throughout the range , although this could be optioned back with the sports instrumentation package . Visual changes were limited : the relocation of the corporate crest to the centre of the redesigned grille , black @-@ coloured trim applied to the tail lamp surrounds on sedans , and the embossment of model badging into the side rubbing strips . The previously undesignated base car , was now the Commodore L , opening up the range for a new unbadged sub @-@ level car . This delete option model , was de @-@ specified and available only to fleet customers . On the premium Commodore SL / E , a resurrected " Shadowtone " exterior paint option became available in a limited range of dark @-@ over @-@ light colour combinations . According to contemporary reviews , changes made to the VC 's steering produced a heavier feel and inclined understeer , while the revised suspension gave a softer ride and addressed concerns raised while riding fully laden .

= = = VH (1981 ? 1984) = = =

The VH series Commodore introduced in September 1981 brought moderately updated frontal bodywork , with a new bonnet and front guards to facilitate the reshaped headlamps and a horizontally slatted grille . These front @-@ end design changes worked to produce a longer , yet wider look . At the rear , sedans featured redesigned tail light clusters , the design of which borrowed from Mercedes @-@ Benz models of the day , using a louvered design . At the same time , the nomenclature of the range was rationalised . The SL superseded the L as the base model , with the old SL level becoming the mid @-@ range SL / X , and the SL / E remaining as the top @-@ of @-@ the @-@ line variant . Wagons were restricted to the SL and SL / X trims . Redesigned pentagonal alloy wheels ? replacing the original SL / E type used since 1978 ? along with a black painted B @-@ pillar , wrap @-@ around chrome rear bumper extensions to the wheel arches , and extended tail lamps that converged with the license plate alcove ? distinguished the range @-@ topping SL / E from other variants . The new pentagonal wheels were initially in short supply , such that only Shadowtone option SL / E sedans received them during 1981 production .

Mechanical specifications carried over , except for a new five @-@ speed manual transmission , optional on the 1 @.@ 9 @-@ litre four @-@ cylinder and 2 @.@ 85 @-@ litre six @-@ cylinder versions . In an attempt to improve sales figures of the inline @-@ four engine , Holden spent considerable time improving its performance and efficiency . Modifications were also made to the 2 @.@ 85 @-@ litre six to lift economy , and the powerplants managed to reduce fuel consumption by as much as 12 @.@ 5 and 14 percent , correspondingly . Holden released the sports @-@ oriented Commodore SS sedan in September 1982 ? reintroducing a nameplate used briefly ten years prior with the HQ series . Provisioned with a choice of 4.2- or optional 5 @.@ 0 @-@ litre V8 engines , both versions of the VH SS were teamed with a four @-@ speed manual transmission . Racing driver Peter Brock 's Holden Dealer Team (HDT) high performance outfit produced three upgraded versions , known as Group One , Group Two and Group Three , the latter version available in either 4 @.@ 2 @-@ litre or more commonly 5 @.@ 0 @-@ litre V8 configuration .

By the time of the VH series , Commodore sales were beginning to decline . Holden 's six @-@ cylinder engine , which was carried over from the Kingswood , could trace its roots back to 1963 and was no longer competitive . Continual improvements made to Commodore 's Ford Falcon rival meant the VH was not significantly more fuel @-@ efficient or better performing despite the smaller size . This was curtailed by the absence of any major powertrain revisions by the time of the VH and the lack of visual departure from the original VB . Holden also had to deal with the influx of their own mid @-@ size Camira from 1982 , which presented comparable interior volume with lower fuel consumption , and for less than the Commodore pricing point . Camira sales were strong initially , but as fuel prices had stabilised , buyers gravitated away from Camira and Commodore towards the larger Falcon , which overtook the Commodore as Australia 's bestselling car for the first time in 1982 .

= = = VK (1984 ? 1986) = = =

Representing the first major change since the VB original , the VK model of 1984 introduced a six @-@ window glasshouse , as opposed to the previous four @-@ window design , to make the Commodore appear larger . The revised design helped stimulate sales , which totalled 135 @,@ 000 in two years . This did not put an end to Holden 's monetary woes . Sales of the initially popular Camira slumped due to unforeseen quality issues , while the Holden WB series commercial vehicle range and the Statesman WB luxury models were starting to show their age ; their 1971 origins compared unfavourably with Ford 's more modern Falcon and Fairlane models .

New names for the trim levels were also introduced , such as Commodore Executive (an SL with air conditioning and automatic transmission) , Commodore Berlina (replacing SL / X) and Calais (replacing SL / E) . The 3 @.@ 3 @-@ litre Blue straight @-@ six engine was replaced by the Black specification , gaining computer @-@ controlled ignition system on the carburettor versions and optional electronic fuel injection boosting power output to 106 kilowatts (142 hp) . The 5 @.@ 0

@-@ litre V8 engine continued to power high specification variants , but was shrunk from 5044 cc to 4987 cc in 1985 due to new Group A racing homologation rules . The new unit cut its predecessor 's weight by 75 kilograms (165 lb) and models were fitted with an upgraded braking system . As high oil prices became a thing of the past , Holden decided to drop the 2.85- six and 4 @.@ 2 @-@ litre V8 , while the 1 @.@ 9 @-@ litre four @-@ cylinder was limited to New Zealand .

= = = VL (1986 ? 1988) = = =

Marking a high point in terms of sales , the last @-@ of @-@ the @-@ series VL Commodore sold in record numbers , finally managing to outsell the Ford Falcon in the private sector . The 1986 VL represented a substantial makeover of the VK and would be the last of the mid @-@ size Commodores . Designers distanced the Commodore further away from its Opel origins , by smoothing the lines of the outer body and incorporating a subtle tail spoiler . A thorough redesign of the nose saw the Commodore gain sleek , narrow headlamps and a shallower grille , while the Calais specification employed unique partially concealed headlamps .

By this stage , Holden 's 24 ? year ? old six @-@ cylinder was thoroughly outmoded and would have been difficult to re @-@ engineer to comply with pending emission standards and the introduction of unleaded fuel . This led Holden to sign a deal with Nissan of Japan to import their RB30E engine . This seemed a good idea in 1983 when the Australian dollar was strong ; however by 1986 the once viable prospect became rather expensive . The public quickly accepted what was at first a controversial move , as reports emerged of the improvements in refinement , 33 percent gain in power and 15 percent better economy over the carburettor version of the VK 's Black straight @-@ six . An optional turbocharger appeared six months later and lifted power output to 150 kilowatts (200 hp) . In October 1986 , an unleaded edition of Holden ? s carburettored V8 engine was publicised . Holden had originally planned to discontinue the V8 to spare the engineering expense of converting to unleaded . However , public outcry persuaded them to relent . VLs in New Zealand were also available with the 2 @.@ 0 @-@ litre six @-@ cylinder RB20E engine .

The VL suffered from some common build quality problems , such as poor windshield sealing , that can lead to water leakages and corrosion . Awkward packaging under the low bonnet coupled with Holden 's decision to utilise a cross @-@ flow radiator (as opposed to the up @-@ down flow radiator installed to the equivalent Nissan Skyline) meant the six @-@ cylinder engine was especially susceptible to cracked cylinder heads , a problem not displayed on the Nissan Skyline with which it shares the RB30E engine . The Used Car Safety Ratings , published in 2008 by the Monash University Accident Research Centre , found that first generation Commodores (VB ? VL) provide a " worse than average " level of occupant safety protection in the event of an accident .

= = Second generation = =

= = = VN (1988 ? 1991) = = =

The VN Commodore of 1988 and subsequent second generation models took their bodywork from the larger Opel Senator B and new Opel Omega A. However , this time , the floor plan was widened and stretched ; now matching the rival Ford Falcon for size . Continuing financial woes at Holden meant the wider VN body was underpinned by narrow , carry @-@ over VL chassis components in a bid to save development costs . In the VN and succeeding models , the Commodore Berlina became known simply as the Berlina . The range expanded in 1990 to include a utility variant , given the model designation VG . This was built on a longer @-@ wheelbase platform that it shared with the station wagon and luxury VQ Statesman sedans released earlier in the year . During this time , the rival Ford EA Falcon was plagued with initial quality issues which tarnished its reputation . Buyers embraced the VN Commodore , helping Holden to recover and post an operating profit of A $ 157 @.@ 3 million for 1989 . The team at Wheels magazine awarded the VN Car of the Year in 1988 : the second Commodore model to receive this award .

Changes in the relative values of the Australian dollar and Japanese yen made it financially impractical to continue with the well @-@ regarded Nissan engine of the VL . Instead , Holden manufactured their own 3 @.@ 8 @-@ litre V6 engine based on a Buick design , adapted from FWD to RWD . The 5 @.@ 0 @-@ litre V8 remained optional and received a power boost to 165 kilowatts (221 hp) courtesy of multi @-@ point fuel injection . Although not known for its refinement , the new V6 was nevertheless praised for its performance and fuel efficiency at the time . A 2 @.@ 0 @-@ litre Family II engine was also offered for some export markets including New Zealand and Singapore where it was sold as the Holden Berlina . Accompanying the changes to engines , the VL 's four @-@ speed automatic transmission was replaced by the Turbo @-@ Hydramatic and a Borg @-@ Warner five @-@ speed manual . A Series II update of the VN appeared in September 1989 , featuring a revised V6 engine known internally as the EV6 . With the update came a power hike of rising to 127 kilowatts (170 hp) from 125 kilowatts (168 hp) .

Under an unsuccessful model sharing arrangement that was part of the Hawke Labor government reforms in 1989 , which saw the formation of the United Australian Automobile Industries alliance between Holden and Toyota Australia , the latter began selling badge engineered versions of the VN Commodore manufactured by Holden . The rebadged Commodores were sold as the Toyota Lexcen , named after Ben Lexcen who was the designer of Australia II yacht that won the 1983 America 's Cup . The original T1 Lexcen offered sedan and station wagon body forms in three levels of trim : base , GL and GLX . Moreover , they were only available with 3 @.@ 8 @-@ litre V6 engine and automatic transmission combination .

= = = VP (1991 ? 1993) = = =

The VP update of 1991 featured cosmetic changes and mechanical however most were not visible unless you were to pull the motor down ; and a very similar revised 3 @.@ 8 @-@ litre V6 and 5 @.@ 0 @-@ litre V8 engines from the VN were carried over . The 2 @.@ 0 @-@ litre straight @-@ four engine previously available in New Zealand was discontinued . Exterior cosmetic changes included a translucent acrylic grille on the base level Executive and Berlina , with a colour @-@ coded grille for the S and SS , and a chrome grille for Calais . Updated tail lights and boot garnishes were also a part of the changes , which were different for each model , with the Berlina having grey stripes and the Calais chrome stripes . Semi @-@ trailing arm independent rear suspension became standard on the Calais and SS , but was made an option on lower @-@ end models in lieu of the live rear axle , improving ride and handling .

A new wider front track was introduced to address issues with the previous carried @-@ over VL chassis components . In August 1992 , anti @-@ lock brakes were introduced as an option on the Calais and SS trim levels , later becoming optional on all Series II variants . This January 1993 update also included a colour @-@ coded grille for the Executive and alloy wheels for the Commodore S.

Toyota 's pattern of updating their Lexcen model tended to follow Commodore 's model cycle . The T2 (VP) Lexcen from 1991 pioneered new specification designations : CSi , VXi and Newport . All future updates (T3 (VR) , T4 (VS) and T5 (VS II) Lexcens) made use of the new naming system until 1997 , when the badge engineering scheme ceased . To give further differentiation to the Lexcen from the Commodore , the Lexcens from the VP model onwards had unique front @-@ end styling treatments .

= = = VR (1993 ? 1995) = = =

The 1993 VR Commodore represented a major facelift of the second generation architecture leaving only the doors and roof untouched . Approximately 80 percent of car was new in comparison to the preceding model . Exterior changes brought an overall smoother body , semicircular wheel arches and the " twin @-@ kidney " grille ? a Commodore styling trait which remained until the VY model of 2002 and remains a permanent staple on the HSV variants to this day . The rear @-@ end treatment saw raised tail lights , implemented for safety reasons , and a driver 's side airbag was

introduced as an option : a first for an Australian @-@ built car . Other safety features such as anti @-@ lock brakes and independent rear suspension were only available with the new electronic GM 4L60 @-@ E automatic transmission . Along with a driver 's airbag and cruise control , these features were packaged into a new Acclaim specification level : a family @-@ oriented safety spec above the entry @-@ level Executive . Holden 's strong focus on safety can be seen in the Used Car Safety Ratings . The findings show that in an accident , VN / VP Commodores provide a " worse than average " level of occupant protection . However , the updated VR / VS models were found to provide a " better than average " level of safety protection . Holden issued a Series II revision in September 1994 bringing audible warning chimes for the handbrake and fuel level among other changes .

The latest revision of the Buick 3 @.@ 8 @-@ litre V6 engine was fitted to the VR Commodore , featuring rolling @-@ element bearings in the valve rocker arms and increased compression ratios . These changes combined to deliver an increase in power to 130 kilowatts (170 hp) and further improvement in noise , vibration , and harshness levels . Wheels magazine awarded the VR Commodore Car of the Year in 1993 .

= = = VS (1995 ? 1997) = = =

The 1995 VS Commodore served as a mechanical update of the VR , destined to maintain sales momentum before the arrival of an all @-@ new VT model . The extent of exterior changes amounted to little more than a redesigned Holden logo and wheel trims . An overhauled Ecotec (Emissions and Consumption Optimisation through TEChnology) version of the Buick V6 engine coincided with changes to the engine in the United States . The Ecotec engine packed 13 percent more power for a total of 147 kilowatts (197 hp) , cut fuel consumption by 5 percent , increased the compression ratio from 9 @.@ 0 : 1 to 9 @.@ 4 : 1 and improved on the engine 's previous rough characteristics . Holden mated the new engine with a modified version of the GM 4L60 @-@ E automatic transmission , improving throttle response and smoothing gear changes . The Series II update of June 1996 included elliptical side turn signals , interior tweaks and the introduction of a supercharged V6 engine for selected trim levels , and the introduction of a new Getrag manual transmission . The new supercharged engine slotted between the existing V6 and V8 engines in the lineup and was officially rated at 165 kilowatts (221 hp) , just 3 kilowatts (4 @.@ 0 hp) below the V8 .

The VS Commodore was the last of which to be sold as Toyota Lexcens , as Holden and Toyota ended their model @-@ sharing scheme . The last Lexcens were built during 1997 . This model was also sold as the VS Commodore Royale in New Zealand . Similar in specification to the Calais also sold in New Zealand , the Royale featured a standard VS Commodore body with the front end from the VS Caprice and an Opel 2 @.@ 6 @-@ litre 54 @-@ Degree V6 engine . The Royale was also sold between 1995 and 1997 in small numbers to Malaysia and Singapore as the Opel Calais .

= = Third generation = =

= = = VT (1997 ? 2000) = = =

With the VT Commodore of 1997 , Holden looked again to Opel in Germany for a donor platform . The proposal was to take the Opel Omega B and broaden the vehicle 's width and mechanical setup for local conditions . In the early days , Holden considered adopting the Omega as is , save for the engines and transmissions , and even investigated reskinning the existing VR / VS architecture . Later on , the VT bodywork spawned a new generation of Statesman and Caprice (again based on the long @-@ wheelbase wagons) , and even went as far as resurrecting the iconic Monaro coupé of the 1960s and 1970s via a prototype presented at the 1998 Sydney Motor Show .

The VT heralded the fitment of semi @-@ trailing arm independent rear suspension as standard across the range , a significant selling point over the rival Falcon , along with increased electronics

such as Traction Control . However , in terms of suspension , the original Opel design was simplified by removing the toe control links that was standard equipment on the European Omega since 1987 . Consequently , this afflicted the VT with excessive tyre wear due to distortions to the suspension camber angle and toe under heavy load , such as heavy towing or when travelling over undulated surfaces .

Notably , Holden 's performance arm HSV re @-@ added the toe control link on the flagship GTS 300 model . The 1999 Series II update replaced the venerable Holden 5 @.@ 0 @-@ litre V8 engine with a new 5 @.@ 7 @-@ litre Generation III V8 sourced from the United States . The V8 was detuned to 220 kilowatts (300 hp) from the original US version , but would receive incremental power upgrades to 250 kilowatts (340 hp) throughout its time in the Commodore , before finally being replaced by the related Generation 4 in the VZ . The supercharged V6 was uprated to 171 kilowatts (229 hp) from the VS . Safety wise , side airbags became an option for the Acclaim and higher models , a first for Holden .

From the onset , parent company General Motors was interested in incorporating a left @-@ hand drive Commodore in its Buick lineup , as manifested by the unveiling of the Buick XP2000 concept car in 1996 . Although this idea was ultimately abandoned (due to pressures by the North American automotive trade unions to retain local production) , the GM @-@ funded project allowed Holden to enter into a range of left @-@ hand export markets . Thus began the Commodore 's rapid expansion into parts of Indochina , the Middle East and South Africa badged as the Chevrolet Lumina and Brazil as the Chevrolet Omega 3 @.@ 8 V6 . In its home market , the VT series was awarded the 1997 Wheels Car of the Year award , the fourth such award in Commodore 's history . It found ready acceptance in the market as many buyers steered away from the slow selling Ford AU Falcon , becoming the best selling Commodore to date and cementing its place as number one in Australian sales .

The sedan and wagon range comprised : Commodore Executive (base and fleet package) ; Commodore Acclaim (family and safety package) ; Berlina (luxury package) and Calais (sedan @-@ only sport luxury package) . Limited editions included a " Sydney 2000 " Olympic version and Holden 50th Anniversary based on better equipped Executive models (e.g. Berlina alloy wheels on the former but no climate control) .

= = = VX (2000 ? 2002) = = =

The VX update from 2000 featured a revised headlamp design . The VT 's rear tail lamp panel was replaced by two separate light assemblies . Conversely , the luxury @-@ oriented Berlina and Calais sedans continued using a full @-@ width boot @-@ lid panel incorporating the registration plate and tail lamps .

The VX series also formed the basis for a new Holden Ute , designated the VU @-@ series . Earlier utility models were instead entitled " Commodore utility " . An updated Series II was launched in early 2002 , featuring revised rear suspension system now equipped with toe control links to address the VT 's issues . The VX series also spawned the production version of the re @-@ launched Holden Monaro (allowing Holden to commence exports to the United States , with this coupé sold as the Pontiac GTO) .

Safety played a substantial role in the development of the VX model . Bosch 5 @.@ 3 anti @-@ lock brakes were made standard on all variants , a first for an Australian manufactured car ; and traction control was made available on vehicles equipped with manual transmission . Extensive research was undertaken to reduce the effects from a side @-@ impact collision through modification of the B @-@ pillars . The risk presented by a side @-@ impact collision in a VX fitted without side airbags is reduced by 50 percent when compared to a similarly specified VT model .

= = = VY (2002 ? 2004) = = =

The A $ 250 million VY mid @-@ cycle update of 2002 represented the first major styling shift since the 1997 VT . Designers discarded the rounded front and rear styling of the VT and VX models ,

adopting more aggressive , angular lines . The same approach was applied to the interior , whereby the curvaceous dashboard design was orphaned in favour of an angular , symmetrical design . Satin chrome plastic now dominated the façade of the centre console stack , and high @-@ end models received fold @-@ out cup holders borrowed from fellow GM subsidiary Saab . Leaving Eurovox behind , Holden turned towards German electronics manufacturer Blaupunkt to source audio systems ? an arrangement that remains in place today .

Engineering wise , Holden kept the changes low key . A revised steering system and tweaked suspension tuning were among some of the changes to sharpen handling precision . Further improvements were made to the Generation III V8 engine to produce peak power of 235 kilowatts (315 hp) for sports variants . In a bid to recapture the market for low @-@ cost , high @-@ performance cars , Holden created a new SV8 specification level . Based on the entry @-@ level Executive , the SV8 inherited the V8 mechanical package from the SS but made do without the luxury appointments and was sold at a correspondingly lower price . Holden also experimented by releasing a limited edition wagon version of its high @-@ performance SS variant , of which only 850 were built . The Series II update added a front strut bar as standard to the SS , which was claimed to increase rigidity and hence handling . As became the trend , the update raised V8 power , now up 10 kilowatts (13 hp) . Amendments in the remaining models were confined to new wheels , trims and decals , however , the Calais has taken on a sports @-@ luxury persona as opposed to the discrete luxury character seen in previous models . This repositioning in turn affected the Berlina 's standing . The once second @-@ tier model now became the sole luxury model , only overshadowed by the more expensive Calais . Coinciding with the VY II models was the first four @-@ door utility model dubbed the Holden Crewman . Crewman 's underpinnings and body structure while somewhat unique , shared a fair amount in common with the Statesman / Caprice , One tonner and the two @-@ door Ute .

In 2003 , Holden launched an AWD system that it developed for the VY platform dubbed Cross Trac , at a cost of A $ 125 million . Unveiled after the Series II updates , the first application of this electronically controlled system was the Holden Adventra , a raised VY wagon crossover . The system was only available in combination with the V8 and automatic transmission . Holden chose not to spend extra engineering resources on adapting the AWD system to the 3 @.@ 8 @-@ litre V6 , due to be replaced in the upcoming VZ model . Unfortunately for Holden , the Adventra fell well short of expected sales , despite modest targets .

= = = VZ (2004 ? 2006) = = =

The final chapter of the third generation series was the VZ Commodore . Debuting in 2004 with a new series of V6 engines known as the Alloytec V6 , both 175 kilowatts (235 hp) and 190 kilowatts (250 hp) versions of the 3 @.@ 6 @-@ litre engine were offered . These were later upgraded to 180 and 195 kilowatts (241 and 261 hp) respectively in the VE model . When compared to the previous Ecotec engines , the Alloytec benefits from increased power output , responsiveness and fuel efficiency . The new engines were mated to a new five @-@ speed 5L40E automatic transmission on the luxury V6 variants , and a new six @-@ speed Aisin AY6 manual transmission on the six @-@ cylinder SV6 sports variant . However , the long serving four @-@ speed automatic carried on in other variants , albeit with further tweaks in an attempt to address complaints about refinement . A new 6 @.@ 0 @-@ litre Generation 4 V8 engine was added to the range in January 2006 to comply with Euro III emission standards . Compared to the American version , both Active Fuel Management and variable valve timing were removed . The Alloytec V6 was also affected by the new standards , which saw the peak output reduced to 172 kilowatts (231 hp) .

Along with the new powertrain , Holden also introduced new safety features such as electronic stability control and brake assist . The Used Car Safety Ratings evaluation found that VT / VX Commodores provide a " better than average " level of occupant protection in the event of an accident , with VY / VZ models uprated to " significantly better than average " . Interestingly , ANCAP crash test results rate the fourth generation VE lower in the offset frontal impact test than the third generation VY / VZ Commodore . The overall crash score was marginally higher than the

outgoing model due to improved side impact protection .

= = Fourth generation = =

= = = VE (2006 ? 2013) = = =

Launched in 2006 after GM 's 2003 abandonment of their last European rear @-@ drive sedan , the Opel Omega , the VE is the first Commodore model designed entirely in Australia , as opposed to being based on an adapted Opel @-@ sourced platform . Given this and high public expectations of quality , the budget in developing the car reportedly exceeded A $ 1 billion . Underpinned by the new Holden developed GM Zeta platform , the VE features more sophisticated independent suspension all round and near @-@ even 50 : 50 weight distribution , leading to improved handling . Engines and transmissions are largely carried over from the previous VZ model . However , a new six @-@ speed GM 6L80 @-@ E automatic transmission was introduced for V8 variants , replacing the old four @-@ speed automatic now relegated to base models . The design of this new model included innovative features to help minimise export costs , such as a symmetrical centre console that houses a flush @-@ fitting hand brake lever to facilitate its conversion to left @-@ hand drive . Internationally , the Commodore is again badge engineered as the Chevrolet Lumina and Chevrolet Omega , along with its new export market in the United States as the Pontiac G8 (discontinued as of 2010 along with the Pontiac brand) .

Variants by Holden 's performance arm , HSV , were released soon after the sedan 's debut , followed by the long @-@ wheelbase WM Statesman / Caprice models . The VE Ute did not enter production until 2007 whilst the Sportwagon began production in July 2008 . Since its release , the VE has been awarded Wheels Car of the Year , being the fifth Commodore model to do so .

In late 2008 Holden made changes to the VE Commodore , including the addition of a passenger seatbelt @-@ reminder system . The rollout of such modifications allowed the VE range to be upgraded in stages (dependent on model) to the five @-@ star ANCAP safety rating during 2008 and 2009 .

The September 2009 MY10 update to the VE Commodore platform introduces a new standard engine ? a 3 @.@ 0 @-@ litre Spark Ignition Direct Injection (SIDI) V6 on the Omega and Berlina , with a 3 @.@ 6 @-@ litre version of the same reserved for all other V6 variants . The standard transmission is now a six @-@ speed GM 6L50 automatic , replacing the four @-@ speed in Omega and Berlina models and the five @-@ speed in higher luxury levels . A six @-@ speed manual is still available in sport models . Holden claims the new powertrains will provide better fuel economy than some smaller four @-@ cylinder cars ; the 3 @.@ 0 @-@ litre version is rated at 9 @.@ 3 L / 100 km (25 mpg @-@ US ; 30 mpg @-@ imp) . However , economy tests performed by various motoring organisations have yielded varying results .

In mid @-@ 2010 Holden released the VE Series 2 (VEII) . The major difference saw the introduction of the Holden iQ system , a centre @-@ mounted LCD display that provides navigation , bluetooth , and controls to the stereo . There were also small alterations to the styling and other minor changes .

= = = VF (2013 ? present) = = =

The VF Commodore , a major overhaul of the VE , was officially revealed on 10 February 2013 in Melbourne .

The body shell , suspension and electrics of the GM Zeta platform have been thoroughly reworked to reduce weight , improving handling and fuel efficiency . Changes to the model line @-@ up see the deletion of the Berlina nameplate (which was merged with the standard Calais variant , represented the smallest share of sales in Commodore 's line @-@ up) and the base model renamed from Omega to Evoke .

Standard features across the Commodore range includes front and rear parking sensors , reverse

camera and auto park assist , whereas high specifications models such as the Calais @-@ V and SS @-@ V redline models also feature , as standard , forward and reverse collision alert system and a colour heads @-@ up display - all possible thanks to the VF 's electronics now being compatible with those of more developed GM cars , resulting in the new Commodore being cheaper to manufacture . Indeed , recommended retail pricing have been reduced across the range , from A $ 5 @,@ 000 for the base model and up to A $ 10 @,@ 000 for the Calais V V8 and SS V Redline .

A day after the Australian range reveal and in the lead up to the Daytona 500 weekend , a more powerful and better equipped export version of the VF Commodore SS also made its debut in Daytona , Florida , as the MY14 Chevrolet SS . To maximise the SS 's profile in the United States , GM also replaced in NASCAR the silhouette of the Chevrolet Impala with that of the SS .

A Series II update (VF II) was launched in late 2015 , introducing minor styling revisions at the front , while the biggest change was the arrival of a 304 kW (408 hp) LS3 across the entire V8 range . In addition , the SS Redline V 's gear ratios and the Redline 's suspension tune were also revised .

= = Fifth generation = =

Initial speculation in 2013 ? which followed Holden 's announcement of its intention to cease local Australian production ? suggested that Commodore 's fully imported FWD replacement would be based on a GM vehicle designed by Holden and built in China for the Chinese market . In January 2015 , however , automotive journalists claimed the Commodore replacement would be a local adaptation of the next generation Opel Insignia imported from Europe .

Also in January 2015 , Holden confirmed that the Commodore badge will be inherited by the fully imported replacement . This decision was made on the basis of a survey revealing that a majority of customers were in favour of retaining the long @-@ standing Australian badge introduced in 1978 .

By November 2015 , the fifth @-@ generation Commodore was now believed to be a rebadged version of the third @-@ generation Buick LaCrosse , which was presented at that month 's Los Angeles motorshow .

= = Australian export models = =

Since the late 1990s , Commodores have been sent abroad as the Chevrolet Lumina in the Middle East until 2011 and South Africa until 2012 , and as the Chevrolet Omega in Brazil until 2008 and , then again , in 2010 . Vauxhall VXR8 sales began in 2007 . Versions have also been previously exported in the mid @-@ 1990s to Southeast Asia as the Opel Calais and to North America from 2007 to 2009 as the Pontiac G8 . As of June 2014 , the VF Commodore is sold in North America as the Chevrolet SS .

= = = Chevrolet Lumina = = =

Since 1998 , the Holden Commodore has been sold as the Chevrolet Lumina in the Middle East and South Africa , and previously in South East Asia .

A coupe version based on the Holden Monaro was also sold in the Middle East as the Chevrolet Lumina Coupe . In Arabia , the Lumina was offered in four different trims : LS (Omega) , LTZ (Berlina) , S (SV6) and SS (SS) . The LTZ and S comes standard with a 3.6L Alloytec V6 and a 6 @-@ speed automatic transmission for the S and 4 @-@ speed for the LTZ , while the SS comes standard with 6.0L Alloytec V8 with the option of Active Fuel management . A 6 @-@ speed manual is standard with the option of a 6 @-@ speed Automatic on SS . The LTZ was the luxury model , while the S and SS models focused on sportiness . Exports to the Middle East ceased in 2011 .

Lumina models sold in South Africa received updates for the 2011 model year . These changes were introduced to coincide with the release of the VE Series II Commodore . Changes include revised bumpers , there is a chrome moulding above the number plate on the boot lid , refreshed alloy wheel designs and the Holden IQ system . Also the SSV model was introduced . The Holden

Ute is sold as the Lumina Ute in South Africa .

= = Australian production = =

Australian production of the first Commodore launched in 1978 was initially spread between Holden 's Pagewood (NSW) and Dandenong (Vic) plants . In August 1978 , Holden announced a $ 6 @.@ 7 million program to enable assembly of the Commodore range at the Elizabeth (SA) plant , which resulted in the closure of the Pagewood plant a year later . The Australian production of the Commodore was consolidated at Elizabeth in 1988 , coinciding with the launch of the then new VN Commodore .

The Commodore and its derivatives have been the basis of modified variants by companies separate to Holden . Officially , Holden 's performance partner is HSV , although other prominent high performance brands include HDT Special Vehicles , Corsa Specialized Vehicles (CSV) and Walkinshaw Performance (WP) , since the first , third and fourth generation Commodore , respectively .

In December 2013 , Holden announced that it will cease production of the Commodore in Australia in 2017 . This was followed , in December 2015 , by " Project Erich " involving Belgian entrepreneur Guido Dumarey . His plans involve buying the Holden production facilities , with a view to continue producing in Australia a rebadged range of RWD and AWD premium vehicles based on the GM Zeta platform , for local and export sales . Dumarey 's company , Punch Powerglide , already supplies automatic transmissions for Holden 's V6 @-@ powered models made in Australia .

= = Sales = =