

= Toyota Aurion (XV40) =

The Toyota Aurion (XV40) / ?????ri?n / is the original series of the Toyota Aurion , a mid @-@ size car produced by Toyota in Australia and parts of Asia . Designated " XV40 " , Toyota manufactured the first generation Aurion between 2006 and 2012 until it was fully replaced by the XV50 series . While Asian production of the XV50 series began in late @-@ 2011 , Toyota 's Australian operations did not take on production of the new model until 2012 .

Although marketed as a separate model , the XV40 series Aurion is essentially a Toyota Camry (XV40) with revised front- and rear @-@ end treatment , along with changes to the interior . In lieu of the " Aurion " nameplate , the majority of East and Southeast Asian markets received the Camry @-@ based Aurion under the name Toyota Camry . However , in Australasia and the Middle East , Toyota sold the original version of the Camry alongside the Aurion . In these markets , the Aurion replaced the Avalon (XX10) model , which could trace its roots back to 1994 .

In the Australasian and Middle Eastern markets , to further differentiate the Aurion from its Camry sibling , Toyota equipped the Aurion exclusively with a 3 @.@ 5 @-@ litre V6 engine . With the Camry , the company only offered the 2 @.@ 4 @-@ litre four @-@ cylinder version . Previously in these markets , prior to the introduction of the Camry XV40 , Toyota had offered both four- and a six @-@ cylinder powerplants . Along with the naturally aspirated version , Toyota produced an Australia @-@ only supercharged TRD Aurion between 2007 and 2009 as tuned by Toyota Racing Development (TRD) . At its release , Toyota claimed this performance variant to be the world 's most powerful front @-@ wheel drive car . The powertrains used in the Asian specification Camry vary slightly from those of the Aurion . As well as the 3 @.@ 5 @-@ litre V6 , two four @-@ cylinder engines are offered in either 2.0- or a 2 @.@ 4 @-@ litre form . These engines are teamed with a six- , four- and five @-@ speed automatic transmissions , respectively .

= = History of development = =

Before commencing production of the Aurion , Toyota Australia manufactured the full @-@ size Avalon model at its Altona plant in Melbourne until June 2005 . Production of the Avalon had begun in 2000 , taking much of its basic design and mechanical features from the then six @-@ year @-@ old Avalon model sold in North America . The Avalon was offered as a larger , more upmarket car than the Toyota Camry , which it was built alongside . The original sales predictions were not met , with the Avalon failing to challenge rivals such as the Holden Commodore and the Ford Falcon . The reasoning behind this has been widely attributed to the Avalon 's older design and styling , which has been widely described as " bland " , as well as the front @-@ wheel drive configuration and smaller engine displacement . In its best year , the Avalon only managed to reach half of Toyota 's projected sales target , with many potential buyers opting for the slightly smaller sized V6 Camry , featuring the same engine as the Avalon .

Toyota , discovering that the Australian public wanted something that was modern and designed with consideration to the Australian market , began full @-@ scale planning work on its Avalon replacement in 2002 . Toyota Australia realised that no other model being developed at the time for Japan or North America was going to be suitable , and due to the size limitations of the Australian market , a completely indigenous model was unrealisable . However , at that time , Toyota Australia did not have any designers of its own . As a result , the company recruited Paul Beranger in August 2002 to set up Toyota Style Australia (TSA) in an industrial complex located in Dingley Village , Victoria . TSA first developed the X @-@ Runner and Sportivo Coupe concepts , and in 2003 , Nick Hogios , who had previously worked for Ford Australia on designing the XR performance models of the BA Falcon , was appointed chief designer . TSA 's next venture was more significant ? a privately developed model based on the Camry XV30 ? a car that signalled the beginning of the Aurion programme . Codenamed " 380L " and developed during the course of 2003 , this one @-@ off model was forged by stripping panels and interior components from the donor Camry , and substituting these for TSA @-@ developed versions . Total cost was approximately A \$ 1 million . Focus groups conducted by Toyota in early 2003 had ranked the Avalon at the bottom of the list

when compared to the competing Holden Commodore , Ford Falcon , and Mitsubishi Magna . Later on in the year , the same focus groups were called back and the Avalon was exchanged for the 380L . Overall , the groups ranked the Toyota as their first preference , and according to Beranger , " didn 't see the car as a Camry " . As such , Toyota Australia deduced that if the 380L was available for purchase there and then , they could sell it alongside the regular Camry as a six @-@ cylinder car under a different name .

During the 380L development , TSA had regular discussions with Toyota Japan on how its Avalon replacement would eventually turn out . Because TSA were an unknown quantity , having never designed a production vehicle , it took the division some time to convince Japan that they could indeed design a car themselves . When the 380L was consigned to a presentation with Japanese Toyota officials , TSA 's lead designer Nick Hogios was requested to tender a proposal for the next @-@ generation " 042L " Camry design competition . While his submission was not chosen , Hogios was summoned to work on what would become the Aurion , then exclusively referred to as the " Asian " or " prestige " Camry , and codenamed " 043L " . Due to the success of TSA 's earlier concepts and the 380L , Toyota Australia was given the authorisation to manufacture both the regular 042L and 043L Camrys and sell them side @-@ by @-@ side . In Australia however , the regular Camry was to be limited to the four @-@ cylinder engine , and the prestige Camry (later to become the Aurion) to the six . Hogios worked in Japan for nine months during 2004 designing the prestige Camry , and his final design was a collaborative effort between Japanese and Taiwanese designers , but the car 's front @-@ end styling is largely Hogios 's own work . While the work in Japan was being undertaken , TSA began to make changes for the Australian Aurion variants . After the design stage was completed , Toyota Australia then commenced work on the development of the car , concurrently developing both the Australian car and the version for Asia . Beranger proclaims that the entire engineering undertaking , " is probably one of the most significant jobs that any subsidiary of Toyota Japan has done anywhere in the world . " The Australian variant of the car was codenamed " 323L " . Despite both cars being essentially identical , Australia was given a different code due to the car occupying a broader range in that market ? from a fleet vehicle to a sports @-@ oriented model . In Asia , the car 's role is much narrower , being a high @-@ end luxury car .

On 9 February 2006 , Toyota Australia unveiled the Aurion alongside the Aurion Sportivo concept at the Melbourne International Motor Show at an official press conference . Toyota dropped the Avalon tag for their new large car , as it had gained a reputation to be an uninspiring car , both in the flesh and to drive . Toyota made use of the " Aurion " name to give the car a fresh start . Aurion means " tomorrow " in Ancient Greek , and Aurora translates to " the dawn " in Latin . The name was chosen after consumer research on more than 30 potential names . This gives implications of a completely new car and ties in with Toyota 's advertising slogan , " Can 't wait for tomorrow " .

= = = Design = = =

Aurion takes its doors , windows , roof panels , body sides (except front quarters) from the Camry XV40 . However , the other panels are unique from the regular Camry . This component sharing also means that Aurion has the same wheelbase , front and rear axle tracks , and interior dimensions . Interior design also largely parallels the Camry . Notable differences include the redesigned upper dashboard portion and restyled centre console , plus the substitution of the Australian Camry 's hand @-@ operated parking brake with a foot @-@ operated equivalent (as shared with the Camry for Japan and North America) . The reasoning behind this component sharing strategy was to reduce costs and to allow the car to be built alongside the Camry , thus simplifying the manufacturing process .

Toyota claims that the Aurion is designed to Australian tastes , although it has been designed with markets such as Asia in mind . Hogios states that the Aurion follows the traits of current Australian styling , with a tendency to look towards European designs for inspiration . In addition , like its other vehicles of similar vintage , Toyota designed the Aurion within the realm of its " vibrant clarity " design language . According to chief designer Hogios , the car makes particular use of the " vibrant

clarity " theory known as " perfect imbalance " . This involves body features that act as a counterpoint to other body features . Examples of this include intersecting concave and convex surfaces and vertical sculpted features on the front fascia , which are balanced by the horizontal headlamps . The front @-@ end 's " double concave architecture " can also be characterised by its protruding bonnet crease line and deep grille . The same architecture is applied at the rear , with a deep bumper , a clamshell @-@ shaped boot lid that envelops over the flanks , dual exhaust pipes and tail lamps . Design patents were filed on 27 December 2005 at the United States Patent and Trademark Office .

For certain markets like China , where Camry sits right below similar @-@ sized Mercedes @-@ Benz cars as a luxury model , it is important for the Aurion to exemplify the traits of such vehicles . With the development of the Aurion , designers produced two separate philosophies , each pitched at a specific niche of the market . The base model AT @-@ X , and luxury Prodigy and Presara variants employ the comfort design , with the more aggressive sports @-@ oriented style found on the Sportivo versions . To meet this requirement , the Sportivo variants feature unique 17 @-@ inch alloy wheels , a rear spoiler , body kit appendages , and a three @-@ spoke steering wheel . The high @-@ performance TRD models offer a similar sports @-@ oriented design , but are distinguishable by the use of unique body parts . These include a redesigned Formula One @-@ inspired front bumper , with integrated foglamps , a unique rear bumper with fixed tailpipes .

== = Facelift == =

Toyota of Thailand unveiled a reworked version of the East and Southeast Asian @-@ market Camry in June 2009 equipped with a hybrid drivetrain . The revised Aurion @-@ based Camry previewed the Australian Aurion 's then upcoming facelift . The updated car features new headlamp and taillamp lens clusters with integrated foglamps , along with a redesigned front bumper , grille insert , and revised interior trim details . The design registrations for the facelifted hybrid version , noting changes made to the original were filed on 19 December 2008 at the US Patent and Trademark Office . Toyota Australia later revealed the updated car as its Aurion on 21 September . While the front @-@ end of the original Aurion was designed with a " double @-@ concave " architecture , the revised version abandons this for an " X @-@ Form " design philosophy , characterised by a lower and wider trapezoidal shaped grille .

Like the original version , the Aurion continues to offer differing frontal design treatments across the range . From side , the rehashed design is identified by the deletion of bodyside moulding strips and a range of new wheels designs , including the standard fitment of alloy wheels on the base @-@ line AT @-@ X. Interior upgrades in the form of new colour combinations are featured , along with upgraded instruments and gauges giving greater turn signal and warning @-@ signal clarity . Revised audio systems , lighting and in @-@ cabin storage are also featured . Prodigy and Presara versions receive a new " linear satin " wood grain finish .

== = Safety == =

Safety was a key aspect in the development of the Aurion . All safety features are standard across the entire range and there are no optional safety devices . Features such as dual front , side and curtain airbags , traction control , brake assist , electronic brakeforce distribution and Vehicle Stability Control come standard . In tests conducted by Australasian New Car Assessment Program (ANCAP) , the base model scored a four @-@ star rating , with 30 @-@ 03 out of 37 points . Toyota caused controversy by not providing a third test vehicle for ANCAP to use for the optional " side @-@ pole impact test " . This third test , allows tested vehicles to be eligible for a five @-@ star rating if the initial score is high enough . Toyota cited the additional expense of A \$ 75 @-@ 000 ? \$ 100 @-@ 000 including the car as being unjustifiable , and that they did not agree with the nature of the pole test . The scores given without the optional test indicate that the maximum two points that could have been earned would have been slightly less than needed to give the Aurion a five @-@ star rating anyway . Due to Toyota 's decision to fit a driver and front passenger seat belt reminder ,

along with their decision to fund the optional pole test , the Aurion 's safety rating was upgraded to a full five stars from August 2009 production , with a score of 33 @. @ 03 out of 37 .

= = Powertrains = =

The Aurion employs a version of Toyota 's 2GR @-@ FE V6 engine that also powers the V6 Camry outside of Australasia . With an engine displacement of 3 @. @ 5 @-@ litres , the 2GR @-@ FE engine is capable of outputting 200 kW (268 hp) and 336 N · m (248 lb · ft) of torque . Power rises by 4 kW (5 hp) with the use of 95 RON " premium " unleaded petrol . Acceleration figures for the car have been recorded at 7 @. @ 4 seconds from standstill to 100 km / h (62 mph) , and Toyota claims a top speed of 228 km / h (142 mph) . The Aurion , which is Euro IV emissions compliant , is rated at 9 @. @ 9 L / 100 km (23 @. @ 8 mpg @-@ US) under the Australian ADR 81 / 01 fuel consumption test . The dual VVT @-@ i 3 @. @ 5 @-@ litre 2GR @-@ FE engine paired to Toyota 's six @-@ speed U660E automatic transmission . This same transmission is also utilised by the supercharged TRD variants . These produce 241 kW (323 hp) and 400 N · m (295 lb · ft) , combined with a combined fuel consumption of 10 @. @ 9 L / 100 km (21 @. @ 6 mpg @-@ US) .

In some Asian countries where the Aurion is sold as the Toyota Camry , both 2.0- and 2 @. @ 4 @-@ litre powerplants are offered . The naturally aspirated 3 @. @ 5 @-@ litre engine is also available in some of these markets . The 2 @. @ 0 @-@ litre 1AZ @-@ FE inline @-@ four has a maximum output of 108 kW (145 hp) of power and 190 N · m (140 lb · ft) of torque . These figures rise to 127 kW (170 hp) and 224 N · m (165 lb · ft) when the 2 @. @ 4 @-@ litre 2AZ @-@ FE unit is fitted . Of the two four @-@ cylinder motors , the latter is teamed with Toyota 's five @-@ speed U250E automatic , with the U241E four @-@ speed unit reserved for the 2 @. @ 0 @-@ litre model . From circa 2009 , Toyota began offering a new 2 @. @ 0 @-@ litre 3ZR @-@ FE inline @-@ four petrol engine in some markets . Producing 102 kW (137 hp) and 189 N · m (139 lb · ft) , the 3ZR @-@ FE was available with the four @-@ speed U241E automatic , or in some markets with a six @-@ speed manual .

= = Market = =

= = = Australasia = = =

Toyota launched the Aurion in Australasia , where it competes with the rear @-@ wheel drive Ford Falcon , Holden Commodore , and the now discontinued front @-@ wheel drive Mitsubishi 380 . The TRD variants were pitched to compete with the Subaru Liberty GT and Mazda 6 MPS . Since its introduction , the Aurion has received numerous awards and positive reviews . In particular , the car has been praised for its good performance mated with comparatively low fuel consumption , and the inclusion of safety and comfort features that are optional on competitor vehicles .

Prior to its introduction , a target of 24 @, @ 000 annualised sales were predicted for the Australian market , double that of the Avalon 's eventual sales rate . A further 8 @, @ 000 vehicles were forecast to be sent abroad to the Middle East and New Zealand . Starting from 2007 , Toyota received a contract to deliver 10 @, @ 000 export Aurions to the Middle East .

The Aurion was also judged best large car in the Drive Car of the Year competition for both 2006 , 2007 and 2009 .

Specification levels

AT @-@ X : Marketed primarily towards fleets buyers , the entry @-@ level AT @-@ X features air conditioning , power windows and mirrors , among others . The Aurion AT @-@ X was awarded the Australia 's Best Large Car award in 2006 and 2007 ; judges described the Aurion as " ... a terrific well @-@ rounded package of technology and refinement . Toyota has produced a big six that has continued to outstrip traditional rivals in the Australian market . "

Sportivo : Available in two flavours for the Australian market , the Sportivo is the Aurion 's sports oriented variant . The introductory Sportivo SX6 features a specially designed sports body kit ,

sports suspension , sports seats and 17 @-@ inch alloy wheels and tinted sports headlights . The Sportivo ZR6 also shares the same " Sportivo " exterior design , but is specified high , with electrically adjustable leather sports seats , parking sensors and dual @-@ zone climate control air conditioning .

Prodigy : Building onto what the AT @-@ X offers , the semi @-@ luxury Prodigy , branded the Touring in New Zealand and the Middle East , features an electrically adjustable driver 's seat , dual @-@ zone climate control air conditioning , parking sensors , wood grain interior and full leather upholstery . The Prodigy also sees a chrome grille , and 16 @-@ inch alloy wheels along with front fog lamps as standard .

Presara : the luxury @-@ oriented Presara features a lavishly appointed interior with features such as electric seats with a two @-@ memory setting , a moonroof , push @-@ start engine operation , a reversing camera , and satellite navigation . The Presara , marketed under the Grande moniker in New Zealand and the Middle East , also features high @-@ intensity discharge headlamps with auto levelling front lighting system . When reversing , the side mirrors face down towards the ground (unless the mirror adjustment switch is in the off position) to assist the driver when parking in places where space is compromised .

Toyota Australia released the special edition " Touring SE " in October 2007 , based on the AT @-@ X. Features gained over the AT @-@ X comprised 16 @-@ inch alloy wheels , a rear spoiler , six CD stacker , a trip computer , dual zone climate control air @-@ conditioning and a leather steering wheel and selection lever . Front and rear parking sensors , and dual @-@ zone air conditioning were also fitted . The Touring SE was reintroduced in identical form in April 2008 , again in October 2008 , and then finally in April 2009 . These 2009 versions differed slightly , with 17- in lieu of 16 @-@ inch wheels , the Sportivo grille , and sports front and rear lights . The price remains unchanged from the 2007 original . At the same time , a Touring SE variant of the Camry sedan was released with similar upgrades .

In 2011 , a special edition of the Aurion , called the " White LE " was released with only 250 built . The model is based on the Prodigy , however , features a unique exterior and interior combination . The White LE is painted white and has unique alloy wheels , similar to those found on the Australian version Camry Grande . The bodykit is from the Sportivo viarants and the model has unique badging . The interior is a mixture of black and off white on the leather seats and interior panels .

== == TRD Aurion == ==

Toyota unveiled the Aurion Sports Concept at the 2006 Australian International Motor Show , held in Sydney . The A \$ 8 million concept car was a styling exercise previewing the TRD Aurion , which was subsequently released in August 2007 . TRD 's first experiment with supercharger technology was with the Toyota Camry @-@ based 2005 TS @-@ 01 concept .

The project 's exterior design manager was Lee Moran , a former Ford Australia designer . He was chosen by Toyota Styling Australia chief Paul Berninger in 2005 . One of Moran 's focuses was to reduce the size of the grille and add emphasis to the front bumper line below it . This was done so the car had more of a Formula One oriented look . In the Toyota wind tunnel in Japan , the vehicle 's drag coefficient was confirmed at 0 @. @ 30 , meaning that the car would operate better aerodynamically than its non @-@ TRD variants . The TRD also features bold exterior additions that differentiate it with the standard Aurion range , such as exhaust pipes integrated into the bumper , tinted taillight lenses , and a unique bodykit . Along with the supercharged 3 @. @ 5 @-@ litre V6 engine outputting 241 kW (323 hp) of power and 400 N · m (295 lb · ft) of torque , the TRD also incorporates an upgraded suspension system and tyres over the standard Aurion models to improve car handling .

Toyota Australia planned to sell 50 to 70 TRD Aurion units per month with the majority of the sales coming from Australia . However , the project was unsuccessful , and as of 31 March 2009 , TRD Australia halted production of the Aurion TRD (and TRD Hilux) , and the division was shut down . When available , the range comprised two variants , the 3500S and 3500SL . The former features performance mufflers , 19 @-@ inch alloy wheels , red alcantara leather seats with black alcantara

fabric bolsters and other high @-@ performance upgrades . The range @-@ topping 3500SL adds clearance and reverse parking sensors , dual @-@ zone climate control air conditioning , a colour @-@ coded transmission selection lever , and an eight @-@ way adjustable driver 's seat . Furthermore , the SL gains an aluminium rear bumper reinforcement addition , and is the first production car in the world to use the Eaton twin @-@ vortices supercharger . This substantially reduces engine noise while bringing gains to power and torque .

= = = Asia = = =

Toyota also manufactures and markets the Aurion in parts of East and Southeast Asia , where it is marketed under the Toyota Camry branding . This model gets a redesigned grille and is marketed under different trim levels to their Australasian counterparts . Although these vary from country to country , the range consists of the following models in some markets : 2 @. @ 0 E , 2 @. @ 0 G , 2 @. @ 4 E , 2 @. @ 4 G , 2 @. @ 4 Sportivo , 2 @. @ 4 V , 3 @. @ 5 V , and 3 @. @ 5 Q. The decimal in the nomenclature denotes the engine displacement , with the letter representing the level of luxury .

In China , the Camry was unveiled in late April 2006 and commenced production in May . The Camry is sold in two variants ? the 200 and 240 . The 200 variant is mated to the 2 @. @ 0 @-@ litre 1AZ @-@ FE while 240 variant gets the 2 @. @ 4 @-@ litre 2AZ @-@ FE . The range consisted of the 200E , 200GVP , 200G , 200GN , 200GGB , 240GVP , 240G , 240GN , 240GGB , 240V , 240VN and the 240VGB . Transmission choices were the four @-@ speed automatic transmission for the 200 models and the five @-@ speed automatic for the 240 models . The Camry Hybrid was introduced in April 2010 .

In Thailand , the 2 @. @ 0 @-@ litre models are available in two trim packages : the 2 @. @ 0 E and 2 @. @ 0 G. The 2 @. @ 4 variant is also available in Malaysia , utilizing the 2AZ @-@ FE engine model . The output of this 2 @. @ 4 V model is 123 kW (165 hp) at 6000 rpm with 224 N · m (165 lb · ft) of torque at 4000 rpm .

In Indonesia , the Camry is offered with two engines , the four @-@ cylinder mated to a five @-@ speed automatic transmission . This engine is offered in G and V trims . The other engine is the V6 engine mated to a six @-@ speed automatic transmission . This engine is only offered in the top @-@ of @-@ the @-@ line Q trim . The Camry has enjoyed success in Indonesia , being the best selling car in its class . The 2 @. @ 4 V and 3 @. @ 5 Q models have been used extensively by the Indonesian government , owning thousands of Camrys in their fleet .

The Camry in the Philippines offers three grades : the base G , offering a 2 @. @ 4 @-@ litre engine mated to a five @-@ speed automatic transmission , has 2 SRS airbags , has fabric seats and has a foot @-@ type parking brake . The 2 @. @ 4 V is almost the same as the G variant , however , it has a 4 @-@ spoke steering wheel with wood grain , 2 SRS airbags , and has a leather @-@ wrapped wood grain with chrome shift lever and knob . The 3 @. @ 5 Q is the top @-@ of @-@ the @-@ line segment , offering a 3 @. @ 5 2GR @-@ FE V6 , 24V , DOHC and dual VVT @-@ i . It is mated to a six @-@ speed gate @-@ type automatic transmission , adaptive front lighting system , automatic rain sensor , dual exhaust tail pipe , tri @-@ color / Optitron with multi @-@ information display , 2 SRS front airbags , side SRS airbags , and a push start system . All of the variants has an integrated type / tuner / in @-@ dash 6 CD changer / MP3 / WMA . All of the variants use a foot @-@ type parking brake , welcome the driver whenever the ignition is set to " ON " , displaying on the central console " Welcome to Camry " . All of the variants also have 4 front and 2 rear speakers .

In Thailand , the hybrid Camry has been available since 2009 . Its unique and differs it from other Camry hybrids because the petrol version of the Thai Camry is built using the Aurion fascia , the hybrid version also makes use of the same body .

In Vietnam , the Toyota Aurion was introduced in 2006 and has been available only in sedan form with two different trims : Camry 2 @. @ 4 G and 3 @. @ 5 Q. The 2 @. @ 4 G trim comes with the 2 @. @ 4 @-@ litre engine rated 165 hp (123 kW) and a 5 @-@ speed automatic gear box while the 3 @. @ 5 Q trim is equipped with a 3.5L 2GR @-@ FE engine rated 273 @. @ 5 hp (204 kW) (SAE

net) and a 6 @-@ speed automatic transmission standard . The two trims come with many safety features including brake assist system , Electronic brake @-@ force distribution (EBD) , vehicle stability control (VSC) and front and side airbags The Vietnamese Camry is produced at the Toyota production plant in Phúc Yên , V?nh Phú .