

## **TOYOTA AVENSIS**

### **Prestige, comfort and efficiency**

The Toyota Avensis aims to make things easy for the customer, with added style, new engines and innovative technology. Regardless of version or equipment grade, it is designed to be prestigious and trustworthy.

Designed and engineered in Europe and built exclusively in Britain, more than 1.7 million Avensis across four model generations have appeared on European roads since the original was launched at the end of 1997.

Responding to private customers' demands for prestige, luxury and elegance, and user-choser motorists' desire for sportiness, dynamism and a dash of chic, Avensis was comprehensively upgraded (2015 model year) to deliver significant improvements in five key areas: -

- Styling: a more prestigious and dynamic exterior design with LED lamp technology.
- Sensory quality and comfort: a more elegant and refined interior, with an emphasis on significantly improved sensory quality, comfort, trim, finishes and NVH.
- Safety: a comprehensive upgrade of safety systems, targeting a five-star Euro NCAP rating. A focus on active safety technology with a Toyota Safety Sense package, provided as standard.
- Equipment and value for money: a clearly differentiated grade structure with class-leading standard equipment levels and advanced technologies, such as the Toyota Touch 2 system and an eight-inch multimedia touchscreen.
- Driving pleasure and running costs: two new Euro 6 diesel engines with extended service intervals, lower CO<sub>2</sub> emissions across the entire range, lower servicing costs and chassis enhancements to improve ride and handling.

### **STYLING**

- **Energetic Elegance design theme**
- **Evolution of Toyota's design language**

Both the Avensis saloon and Touring Sports wagon have a more distinctive and dynamic appearance, generated by a new Energetic Elegance design theme.

Overall vehicle length has been increased by 40mm and at the front there is a strong look that marks a “second generation” evolution of Toyota’s contemporary design language.

The Toyota emblem is set more prominently within a smaller but sharper-styled upper grille. The grille itself has a chrome trim bar which anchors LED headlamp clusters. These incorporate LED daytime running lights, giving Avensis an individual illumination signature.

The lower grille has been made significantly larger and it spans a centre bumper section finished in gloss black, reinforcing Avensis’s solid front stance. In conjunction with the downward sweep of the new grille, the fog lamp housings have been pushed out to the far edges of the bumper, making the vehicle appear broader.

To the side, a garnish along the sill creates a strong horizontal emphasis, giving the impression of a lower centre of gravity. The more elegant profile is supported by new alloy wheel designs.

The rear of the vehicle has also been designed to add elegance and impact to the broad road stance. The rear light clusters use LED light guide technology to generate a high-tech lighting signature.

### **SENSORY QUALITY, HARMONY AND COMFORT**

- **Elegant and luxurious cabin with improved sensory quality and NVH performance**
- **Harmonised switchgear design with uniform illumination**
- **More supportive front seats**

One of Toyota’s aims in revising Avensis was to guarantee comfort and convenience across the range. The elegant, refined interior makes an important contribution to this goal: sensory quality and NVH have been taken to a higher level and the cabin displays premium quality trim finishes.

The instrument panel is divided into two sections. The sleek, full-width upper part contains an instrument binnacle with recessed tachometer and speedometer dials either side of a large, 4.2-inch TFT multi-information display (colour display on higher grades, monochrome on

Active grade). The lower section houses a centre console that is separated from the transmission tunnel and dominated by an eight-inch full colour touchscreen. A redesigned steering wheel and gear lever complete the driver's cockpit.

Switchgear feel and operation have been improved and sensory quality has been further heightened by harmonising graphics and symbols and providing uniform, blue back-lighting.

Satin chrome highlighting on the instrument binnacle, steering wheel, console switchgear, air vents and gear lever presents a crisper, higher quality appearance.

A range of more appealing interior finishes is available, including combinations of fabric or leather with Alcantara seat upholstery and a new, Dual Ambient light grey colour scheme.

A new front seat design makes for more comfortable long-distance travel – a priority for fleet/business customers.

The size of the upper backrest has been increased and the backrest bolsters have been redesigned, giving both extra shoulder support and better lateral holding performance. The seat suspension mat has also been redesigned to improve pressure distribution and reduce long-haul fatigue. The cushion angle has been increased to give better thigh support and the cushion side bolsters have been reshaped.

## **NOISE, VIBRATION AND HARSHNESS**

NVH levels have been significantly reduced, ensuring that the increase in Avensis's interior quality is matched by a perceptible decrease in cabin noise.

New and thicker materials provide additional sound absorption and insulation, and seal quantity, thickness and width have been increased throughout the body shell.

The thickness and density of the bonnet insulator and the thickness and size of the of the engine under-cover insulator have been increased. Diesel models further benefit from the addition of an underbody damping sheet. A polyurethane foam over-moulding has been incorporated in the wing protector and further detailed changes have been made to sound-absorbing elements in the upper instrument panel and dashboard.

Air conditioning noise has been reduced by improving the heater's air duct seal. Touring Sports Excel models fitted with a Skyview panoramic roof gain a damping sheet in the roof lining.

#### **EQUIPMENT AND VALUE FOR MONEY**

- **Grade structure targets fleet customers with high equipment levels and advanced technology features**
- **Business Edition grade includes Alcantara upholstery and Dual Ambient colour scheme**
- **Toyota Safety Sense packages fitted as standard on all models**

Avensis's grade structure reflects how the car has been designed, engineered and equipped to meet the leading requirements of both private and business customers.

Active and Excel grades mark the entry point and top of the range. These are joined by Business Edition and Business Edition Plus versions at the heart of the line-up.

Across the board, specifications secure high levels of safety, comfort and convenience, not least with the standard provision of Toyota Safety Sense integrated active safety features on all models (further details in the Safety chapter below).

Key features of the Active grade include Pre-Crash Safety system with Autonomous Emergency Braking, cruise control, air conditioning, six-speaker CD/radio audio, Bluetooth, auto-dimming rear-view mirror, LED rear and daytime running lights and power windows.

Business Edition adds to this strong foundation with the Toyota Touch 2 with Go touchscreen multimedia and navigation system, digital/DAB audio package with eight-inch display, reversing camera, front fog lights, rain-sensing wipers, dusk-sensing headlights, automatic air conditioning, 17-inch alloy wheels and part-Alcantara seat upholstery. The active safety features extend to Automatic High Beam, Lane Departure Warning and Road Sign Assist.

Business Edition Plus delivers further premium features including front fog lights with a cornering function, LED headlamps, rear privacy glass and smart entry with push-button start. The LED daytime running lights gain light guides, creating a distinctive lighting signature.

At the top of the range, Excel grade adopts Toyota Touch 2 with Go in a package that has more sophisticated navigation functions and access to additional connected services. The specification also embraces a 10-speaker audio system, full leather seat upholstery, electrically adjustable front seats with heaters and adaptive headlights that adjust automatically to improve illumination through bends and turns. The Excel Touring Sports gains a Skyview panoramic roof,

Option packs are also available: the Protection Pack provides mud flaps, scuff plates, boot liner and rear bumper protector (plus additional load space rails for the Touring Sports if required); the Chrome Pack adds chrome side sill and boot/tailgate trim; and the Parking Pack equips the car with front and rear parking sensors.

### **Principal equipment features**

Standard features on **Active** grade models include: -

- Pre-Crash Safety System
- Autonomous Emergency Braking
- Air conditioning
- Cruise control
- Hill-start Assist Control
- LED daytime running lights and rear lamp clusters
- Auto-dimming rear-view mirror
- TFT multi-information display (monochrome)
- Six-speaker CD/radio audio system
- Bluetooth
- Power front windows

**Business Edition** models build on the Active specification with: -

- Automatic High Beam
- Lane Departure Warning
- Road Sign Assist
- Toyota Touch 2 with Go multimedia and navigation system with eight-inch touchscreen control
- Six-speaker audio system with DAB radio
- Reversing camera
- TFT multi-information display (colour)
- Automatic air conditioning
- Rain-sensing windscreen wipers

Dusk-sensing headlights  
Power windows  
Combination cloth and Alcantara seat upholstery  
Driver's seat lumbar support  
Power retractable door mirrors  
Front fog lights  
17-inch alloy wheels

**Business Edition Plus** further benefits from: -

Smart entry and push-button start  
LED headlamps  
LED daytime running lights with light guides  
Auto-headlamp levelling  
Rear privacy glass  
Front fog lamps with cornering function  
Dedicated-design 17-inch alloy wheels

At the top of the range, **Excel** versions of Avensis gain: -

Toyota Touch 2 with Go with advanced connectivity functions and voice recognition  
10-speaker audio system  
18-inch machined face alloy wheels  
Leather seat upholstery  
Power-adjustable front seats with memory  
Heated front seats  
Adaptive Front-lighting System  
Panoramic roof (Touring Sports)

**Colour TFT multi-information display**

Clear, instant driver information is displayed on a 4.2-inch colour TFT screen, set between the principal meters in the instrument binnacle. The range of data includes audio, phone, navigation and safety functions, including active safety system status and warnings. The display's design allows multiple information sources to be presented simultaneously.

The TFT display is in colour on all Avensis models apart from Active grade, which uses a monochrome version.

All Avensis are covered by Toyota's five-year/100,000-mile new vehicle warranty.

## **DRIVING PLEASURE AND RUNNING COSTS**

- 1.6 and 2.0 D-4D diesel engines, with CO<sub>2</sub> emissions from 108g/km
- Toyota's Multidrive S CVT extensively revised for quieter operation, improved driveability and four per cent reduction in fuel consumption
- Revisions to front and rear suspension, improved steering feel and responsiveness.

Toyota comprehensively revised the powertrain line-up for new Avensis, building on its reputation for reliability and durability and providing customers with the benefits of lower fuel consumption, emissions and ownership costs.

At the same time, enhancements to the body structure, suspension and power steering deliver improvements in ride comfort and handling performance.

### **Diesel engines**

The UK range features two new diesels: a 1.6-litre D-4D and, making its first appearance in a Toyota, a 2.0-litre D-4D unit.

The 1.6 D-4D generates CO<sub>2</sub> emissions of 108g/km, 11g/km less than the 2.0-litre unit it replaced. The new 2.0-litre engine's 119g/km represents a 24g/km reduction on the performance of the previous 2.2-litre unit.

An increase in service intervals to 12,500 miles and a reduction of about 20 per cent in the 36,000-mile/three-year servicing costs for both units have helped make the diesels cheaper to run.

### **New 1.6 D-4D**

In tune with the current move to downsize powerplants to achieve better fuel economy, lower emissions and better driving dynamics, Toyota replaced Avensis's 2.0-litre D-4D diesel engine with a new 1.6 D-4D.

This Euro 6-compliant engine, working with a six-speed manual transmission, is 20kg lighter than its predecessor. It develops 110bhp/82kW at 4,000rpm and 270Nm of torque from 1,750 to 2,250rpm. This gives 0 – 62mph acceleration in 11.4 seconds and a top speed of 115mph.

The engine posts an eight per cent improvement in fuel efficiency, with combined cycle fuel consumption of 67.3mpg; at the same time, CO<sub>2</sub> emissions have been reduced from 119 to 108g/km.

The engine has been tuned for fast throttle response throughout the rev range. It generates good initial response at low rpm, then, as turbo boost develops, a linear build-up of torque. The availability of torque has been extended, so the engine will rev freely beyond 3,000rpm without running out of breath.

### **New 2.0-litre D-4D**

The new Euro 6-compliant 2.0-litre D-4D shares the low fuel consumption and emissions performance of its 1.6-litre sister unit, but it has been tuned for a stronger focus on performance.

It develops a maximum 141bhp/105kW at 4,000rpm and a generous 320Nm of torque from 1,750 to 2,500rpm. Its linear torque build-up and willingness to rev gives it particularly strong in-gear responsiveness and acceleration: it will move the car from rest to 62mph in 9.5 seconds and reach a top speed of 124mph.

Numerous developments, including a new timing chain design, ensure quiet running at all speeds, and Toyota's stop and start technology, coupled with a tall sixth gear for motorway cruising, helps the 2.0 D-4D return average fuel consumption of 62.8mpg with 119g/km CO<sub>2</sub> emissions.

### **Diesel engine features and benefits**

Both the new diesel engines benefit from numerous advanced technologies that help minimise fuel consumption and emissions without detracting from engine performance and driving pleasure.

A fuel injection control system uses Digital Diesel Electronics to control injection in line with engine speed, load and temperature to gain more precise control of pressure, timing and volume than can be achieved with conventional common rail technology.

This allows for better fuel efficiency and compliance with stricter emissions regulations to be achieved with no detriment to engine performance.

A combination of swirl and tangential intake ports creates an ideal swirl pattern in the intake air/fuel mixture, promoting more complete combustion and, hence, greater engine efficiency.

The camshaft has a built-up construction, comprising individual cams, gears and shaft. Each component is made from a carefully selected combination of materials. This design approach reduces overall weight by around 40 per cent, a saving that contributes to overall fuel efficiency.

The Hydraulic Valve Clearance Compensation system features hydraulic pistons that continuously adjust individual intake and exhaust valve clearance according to engine speed and load. This optimises intake and exhaust airflow for better engine performance and fuel efficiency.

A cross-flow cooling system channels engine coolant flow from the hotter exhaust side to the cooler intake side for more even heat distribution over the cylinder head. This reduces pressure losses and enhances fuel efficiency.

Together with its sound-absorbing properties, the resin cylinder head cover allows – thanks to its ease of manufacture – for a more complex inner structure. This means the oil separator and pressure control valve have been built into the cover, to separate the oil from the blow-by gas. This reduces the amount of oil burned during re-combustion, reducing emission impurities.

A new charging control system automatically regulates the amount of electricity generated by the alternator, which affects the amount of load on the engine, according to driving conditions. The system increases alternator load under deceleration and decreases it under acceleration, and can also balance fuel efficiency with the electricity needed when the engine is idling, or at cruising speed.

Both engines are equipped with Toyota's stop and start system and a high-performance diesel particulate filter, further reducing particulate and CO<sub>2</sub> emissions.

### **1.8 Valvematic petrol engine**

The four-cylinder, 1,798cc, 16-valve DOHC engine develops 145bhp/108kW at 6,400rpm and 180Nm of torque at 3,800rpm. Matched to a six-speed manual transmission, it will accelerate the Avensis from 0 – 62mph in 9.4 seconds (10.4 with CVT) and on to a 124mph top speed.

Combined cycle fuel consumption has improved to 47.1mpg and CO<sub>2</sub> emissions have fallen by 14g/km to 139g/km (figures for saloon with 16-inch wheels). When matched to the Multidrive S CVT, the benchmark figures mark a similar improvement at 138g/km and 47.9mpg.

### **Engine enhancements and benefits**

The operating angle of the Valvematic and VVT-i systems has been increased to optimise valve lift angle and timing across the driving range. As a result, power output has been increased and mechanical losses reduced, thus improving fuel efficiency.

Continuous optimal throttle control in accordance with Valvematic and VVT-i operation further improves both fuel efficiency and driveability, and the addition of an oil temperature sensor enhances VVT-i performance for a further gain in fuel economy.

The compression ratio of the 1.8 Valvematic engine has been increased to 10.7:1, enhancing thermal efficiency, and the fuel system benefits from changes to fuel injection and timing, reducing fuel loss to the exhaust side under injection.

Friction has been significantly reduced by fitting a tension-reducing ribbed V belt auto-tensioner and a low-friction timing chain and chain damper; the adoption of Teflon coatings to front and rear oil seals and resin coatings to the sliding surface of the crankshaft, camshaft and thrust bearing; and the reduction of both oil pump flow and vacuum pump drive torque.

Engine warming performance has been improved by using a shell-type exhaust manifold and the optimisation of valve timing and fuel injection quantities. This accelerates the increase in exhaust gas temperature, warming the catalyst quickly to reduce emissions from cold starts.

The cooling system has been improved through the installation of a high-response thermostat and precise electric fan control. These measures improve anti-knock performance and, hence, fuel efficiency.

Compatibility with high sulphur fuels has been achieved through a nitride treatment on the positive crankcase ventilation valve and a height change to the piston rings.

Finally, both units also benefit from the previously described Charging Control System.

### **Revised CVT system**

A further four per cent improvement in fuel economy has been realised through extensive revisions to the Multidrive S continuously variable transmission that is optionally available with the 1.8 engine. These include new torque converter, continuously variable unit, oil pump, reduction and differential gears, hydraulic control unit and CVT fluid warmer.

The CVT control logic has also been adjusted to reduce engine revving at medium throttle settings, more closely matching engine speed to throttle inputs, like a conventional automatic transmission.

### **Improved driving dynamics**

The new Avensis's bodyshell has been rendered more rigid by the application of additional spot-welding points and the use of a high-strength urethane windscreen bonding material.

The car retains the proven MacPherson strut front and double wishbone rear suspension design of its predecessor, but both elements benefit from significant changes to improve ride comfort and handling. These include a change from resin to steel for the bearing material, reducing friction and so improving steering feel and feedback.

At the front there is a new strut bearing and support, a reduction in the spring rate and an increase in the spring side-load compensation. Damping force has been tuned and, in the case of diesel models, the springs' shape has been changed and their rates adjusted in favour of comfort. .

Similar adjustments have been made to the rear, together with a new piston valve design that gives a perceptible improvement in ride comfort.

Steering feel and responsiveness have been improved by the use of a new intermediate shaft, a change in the diameter of the anti-roll bar and an increase in body shell rigidity through the use of high-strength urethane bonding for the windscreen.

Changes have also been made to the electric power steering's assistance characteristics. The neutral position is more accurate for better high-speed straight line driving, and steering torque delivery has been fine-tuned to better match linearity with lateral acceleration and yaw response.

Hill-start Assist Control adds further benefits. This applies brake pressure to all four wheels for a maximum two seconds when the driver comes off the brake pedal to apply the throttle. This prevents the vehicle from rolling backwards when pulling away on a steep or slippery incline.

## **SAFETY**

- **Toyota Safety Sense system fitted as standard, supporting target of five-star Euro NCAP crash test rating**
- **Package on all models includes Pre-Collision System with Autonomous Emergency Braking.**
- **Lane Departure Alert, Road Sign Assist and Automatic High Beam additionally provided on all models bar entry-level grade**

In anticipation of securing a five-star rating in the Euro NCAP crash test programme, Avensis takes active safety and driver assistance to new levels with Toyota Safety Sense.

On all models this provides a Pre-Collision System with Autonomous Emergency Braking. On all bar the entry-level Active grade the package further includes Lane Departure Alert, Automatic High Beam and Road Sign Assist, functions which process information gathered by a compact laser and camera unit mounted on the head of the windscreen.

The Pre-Collision System operates at speeds between approximately six and 49mph, detecting vehicles on the road ahead and reducing the risk of a rear collision. When it determines an impact risk, it triggers visual and audible alerts to prompt the driver to apply the brakes. At the same time, it primes the car's braking system to deliver extra stopping force when the driver presses the brake pedal. If the driver fails to react in time, the system automatically applies the brakes, reducing speed by about 19mph, or potentially bringing the car to a stop, to prevent a collision or mitigate the force of impact.

### **Lane Departure Alert**

The Lane Departure Alert system monitors lane markings on the road and helps prevent accidents and head-on collisions caused by a vehicle leaving its lane. If the vehicle starts to deviate from its lane without the turn indicators being used, the system alerts the driver with visual and audible warnings.

## Automatic High Beam

The Automatic High Beam helps ensure excellent forward visibility when driving at night. It detects both the headlights of oncoming vehicles, and the tail lights of vehicles ahead, automatically switching between high and low beams to avoid dazzling other drivers. As high beam is used more frequently, pedestrians and obstacles are easier and quicker to spot.

## Road Sign Assist

Road Sign Assist helps ensure drivers are kept informed, even if they have driven past a road sign without noticing. It recognises signage such as speed limits and “no overtaking” warnings, and displays the information on the TFT multi-information screen in the instrument binnacle. If the driver exceeds the speed limit, the system will activate a warning light and buzzer.

## TOYOTA AVENSIS TIMELINE AND UK SALES

YEAR	MONTH	EVENT
1998	January	First generation Avensis launched, replacing Carina E. Production is at Toyota's UK factory at Burnaston.
2000	August	Midlife model revisions. 1.6 and 1.8 VVT-i and 2.0 D4 direct injection engines introduced.  2.0 D-4D diesel introduced – Avensis becomes first European Toyota to use a D-4D unit.
2003	March	Second generation Avensis launched, with 1.8 and 2.0 VVT-i engines.
	April	Avensis sets a new record score for adult occupant protection in Euro NCAP crash testing.
	August	Integrated ICE system introduced.
	May	2.0 D-4D engine added to range.
	July	Avensis becomes the first Toyota model to be exported to Japan.
2004	January	2.4 VVT-i and 2.0 D-CAT engines added to the range.
	November	2.0 D-CAT engine deleted.
2005	April	Colour Collection special edition models launched.
	July	2.2 D-4D 150 engine added to range.  2.4 VVT-i engine deleted.
2006	July	Midlife model revisions.

		Flagship T180 version introduced with 2.2 D-4D 180 engine with D-CAT.
2007	April	Range revisions, including new touch-screen full-map satellite navigation on T <sub>3-S</sub> grade and higher and audio upgrade with MP3/WMA digital music file recognition.
	June	TR feature grade introduced. Key specification includes satellite navigation, dual-zone air conditioning and automatic headlights and wipers.
2008	April	Grade structure consolidated: Colour Collection, T <sub>2</sub> , TR, T Spirit and T180.
	October	Third generation Avensis makes its world debut at the Paris motor show
2009	January	New Avensis goes on sale in Europe with new 1.8 and 2.0 Valvematic petrol engines and revised 2.0 D-4D, 2.2 D-4D 150 and 2.2 D-CAT 180 engines. A 2.2 D-CAT 150 automatic is launched in the spring. Petrol engines are available with a new Multidrive S continuously Variable Transmission. A new four-grade range is introduced – T <sub>2</sub> , TR, T <sub>4</sub> and T Spirit.
	July	Engine range revised with introduction of 1.6 Valvematic petrol unit. 2.0 Valvematic and 2.2 D-CAT 180 are deleted.
2010	March	TR grade enhanced for 2010.
	June	Diesel Particulate Filter (DPF) added to 2.0 D-4D to achieve Euro 5 emissions compliance.
2011	August	1.6 Valvematic engine deleted from the range.
	September	Revised Avensis unveiled at Frankfurt motor show
	December	Revised Avensis goes on sale in the UK, retaining previous grade structure but with improved equipment specifications. 2.0 D-4D engine revised for 119g/km emissions, exterior restyled and suspension and steering adjustments made to improve ride and handling.
2013	April	2013 Avensis adopts new grade names and minor specification changes.

2015	March	The new Toyota Avensis makes its debut at the Geneva motor show.
	April	UK order books open for new Avensis, offered in Active, Business Edition, Business Edition Plus and Excel grades.
	September	Avensis gains <a href="#">five-star Euro NCAP safety rating</a> , a result supported by the standard provision of Toyota Safety Sense active safety systems.
2016	May	Avensis gains <a href="#">revised Toyota Touch 2 with Go</a> multimedia system.
2016	December	Design grade is added to the Avensis range.
2017	December	Design grade is deleted from the range.

UK sales in 2017: 3,473

Cumulative sales since launch (1998): 299,535

## TOYOTA AVENSIS TECHNICAL SPECIFICATIONS

<b>1.8 VALVEMATIC</b>	
Engine code	2ZR-FAE
Type	Four cylinders in-line
Valve mechanism	DOHC 16-valve Valvematic
Displacement (cc)	1,798
Bore x stroke (mm)	80.5 x 88.3
Compression ratio	10.7:1
Max. power (bhp/kW @ rpm)	145/108 @ 6,400
Max. torque (Nm @ rpm)	180 @ 4,000
<b>1.6 D-4D</b>	
Engine code	1WW
Type	Four cylinders in-line
Valve mechanism	DOHC 16-valve, common rail injection, hydraulic valve clearance compensation
Displacement (cc)	1,598
Bore x stroke (mm)	78.0 x 83.6
Compression ratio	16.5:1

Max. power (bhp/kW @ rpm)	110/82 @ 4,000			
Max. torque (Nm @ rpm)	270 @ 1,750 – 2,250			
<b>2.0 D-4D</b>				
Engine code	2WW			
Type	Four cylinders in-line			
Valve mechanism	DOHC 16-valve, common rail injection, hydraulic valve clearance compensation			
Displacement (cc)	1,995			
Bore x stroke (mm)	84.0 x 90.0			
Compression ratio	16.5:1			
Max. power (bhp/kW @ rpm)	141/105 @ 4,000			
Max. torque (Nm @ rpm)	320 @ 1,750 – 2,250			
<b>TRANSMISSIONS</b>				
Engine	1.8 Valvematic		1.6 D-4D	2.0 D-4D
Transmission	6MT	MDS	6MT	6MT
Gear ratios	1 <sup>st</sup>	3.538	-	3.818
	2 <sup>nd</sup>	1.913	-	1.913
	3 <sup>rd</sup>	1.310	-	1.218
	4 <sup>th</sup>	0.971	-	0.860
	5 <sup>th</sup>	0.818	-	0.790
	6 <sup>th</sup>	0.700	-	0.638
	Forward	-	2.480 – 0.396	-
	Reverse	3.333	2.604 – 1.680	4.139
Final drive ratio	4.214	5.698	3.526 (1 <sup>st</sup> – 4 <sup>th</sup> )	3.777 (1 <sup>st</sup> – 4 <sup>th</sup> )
<b>BRAKES</b>				
Front	Ventilated discs			
Rear	Solid discs			
Additional features	ABS, EBD, BA, VSC+, TRC			
<b>STEERING</b>				
Type	Rack and pinion electric power steering			
Ratio	13.3:1			
Turns lock-to-lock	2.7			
Min. turning radius – tyre (m)	5.4			
<b>SUSPENSION</b>				
Front	MacPherson strut			
Rear	Double wishbone			
<b>PERFORMANCE</b>				
Engine	1.8 Valvematic		1.6 D-4D	2.0 D-4D
Transmission	6MT	MDS	6MT	6MT

Max. Speed (mph)	Saloon	124	124	115	124
	Wagon	124	124	115	124
0-62mph (sec)	Saloon	9.4	10.4	11.4	9.5
	Wagon	9.7	10.7	11.7	9.8
<b>FUEL CONSUMPTION, EMISSIONS &amp; INSURANCE</b>					
<b>Fuel consumption</b>					
Engine		1.8 Valvematic		1.6 D-4D	2.0 D-4D
Transmission		6MT	MDS	6MT	6MT
Urban	Saloon – 16in wheel	34.9	35.3	55.4	-
	Saloon – 17in wheel	34.9	34.9	55.4	49.6
	Saloon – 18in wheel	-	-	-	47.9
	Wagon – 16in wheel	34.9	35.3	55.4	-
	Wagon – 17in wheel	34.0	34.0	55.4	49.6
	Wagon – 18in wheel	-	-	-	47.9
Extra-urban	Saloon – 16in wheel	57.6	58.9	78.5	-
	Saloon – 17in wheel	57.6	57.6	76.3	74.3
	Saloon – 18in wheel	-	-	-	68.9
	Wagon – 16in wheel	57.6	58.9	76.3	-
	Wagon – 17in wheel	55.4	58.9	74.3	70.6
	Wagon – 18in wheel	-	-	-	68.9
Combined	Saloon – 16in wheel	47.1	47.9	67.3	-
	Saloon – 17in wheel	47.1	46.3	67.3	62.8
	Saloon – 18in wheel	-	-	-	58.9
	Wagon – 16in wheel	46.3	47.1	67.3	-
	Wagon – 17in wheel	45.6	47.1	67.3	61.4
	Wagon – 18in wheel	-	-	-	58.9
Fuel tank capacity (l)		60			
<b>Emissions</b>					
Engine		1.8 Valvematic		1.6 D-4D	2.0 D-4D
		6MT	MDS	6MT	6MT
Urban	Saloon – 16in wheel	187	185	131	-
	Saloon – 17in wheel	189	187	131	148
	Saloon – 18in wheel	-	-	-	153
	Wagon – 16in wheel	188	185	131	-
	Wagon – 17in wheel	191	194	131	148
	Wagon – 18in wheel	-	-	-	153
Extra-urban	Saloon – 16in wheel	112	111	95	-
	Saloon – 17in wheel	112	114	97	102
	Saloon – 18in wheel	-	-	-	107

	Wagon – 16in wheel	112	112	97	-
	Wagon – 17in wheel	116	112	99	104
	Wagon – 18in wheel	-	-	-	107
Combined	Saloon – 16in wheel	139	138	108	-
	Saloon – 17in wheel	140	140	109	119
	Saloon – 18in wheel	-	-	-	124
	Wagon – 16in wheel	140	139	109	-
	Wagon – 17in wheel	143	142	110	120
	Wagon – 18in wheel	-	-	-	124
Emissions standard		Euro 6			
Service intervals		10,000 miles/annually	12,500 miles/annually		
Insurance groups		11E to 19E			
<b>DIMENSIONS</b>					
Body style		Saloon		Wagon	
Overall length (mm)		4,750		4,820	
Overall width (mm)		1,810		1,810	
Overall height (mm)		1,480		1,480	
Wheelbase (mm)		2,700		2,700	
Track – front (mm)		1,560 (16in wheel) 1,550 (17/18in wheel)		1,560 (16in wheel) 1,550 (17/18in wheel)	
Track – rear (mm)		1,550 (16in wheel) 1,540 (17/18in wheel)		1,550 (16in wheel) 1,540 (17/18in wheel)	
Front overhang (mm)		980		980	
Rear overhang (mm)		1,030		1,100	
Drag coefficient (Cd)		0.28		0.29	
VDA luggage capacity – rear seat up (l)		509		543	
VDA luggage capacity – rear seat down (l)		n/a		1,609	
Luggage compartment	Length – rear seat up (mm)	960		1,105	
	Length – rear seat down (mm)	1,685		1,715	
	Max. width (mm)	1,470		1,550	
	Height (mm)	530		765	
<b>WEIGHTS</b>					

Engine		1.8 Valvematic		1.6 D-4D	2.0 D-4D
Transmission		6MT	MDS	6MT	6MT
Kerb weight (kg)	Saloon	1,370 – 1,455	1,405 – 1,475	1,455 – 1,545	1,470 – 1,550
	Wagon	1,405 – 1,510	1,430 – 1,530	1,490 – 1,610	1,490 – 1,610
Gross Vehicle Weight (kg)	Saloon	2,000	2,020	2,040	2,100
	Wagon	2,000	2,020	2,040	2,100
Towing capacity – braked (kg)		1,500	1,600	1,600	1,800
Towing capacity – unbraked (kg)		500			
<b>WHEELS &amp; TYRES</b>					
Wheel size		16in		17in	18in
Tyre size		205/60R16		215/55R17	225/45R18

## TOYOTA AVENSIS EQUIPMENT SPECIFICATIONS

SAFETY	ACTIVE	BUSINESS EDITION	BUSINESS EDITION PLUS	EXCEL
Pre-Collision System with Autonomous Emergency Braking	✓	✓	✓	✓
Pre-Collision Brake Assist	✓	✓	✓	✓
Automatic High Beam	✗	✓	✓	✓
Lane Departure Warning	✗	✓	✓	✓
Road Sign Assist	✗	✓	✓	✓
Driver and front passenger airbags	✓	✓	✓	✓
Front side airbags	✓	✓	✓	✓
Driver's knee airbag	✓	✓	✓	✓
Full-length curtain shield airbags	✓	✓	✓	✓
Passenger front airbag cut-off switch	✓	✓	✓	✓
Isofix child seat mounts on rear seats	✓	✓	✓	✓
Five three-point seatbelts with Emergency Locking Retractor	✓	✓	✓	✓
Front and rear seatbelt fastening reminder system	✓	✓	✓	✓
ABS with Electronic Brakeforce Distribution and Brake Assist	✓	✓	✓	✓

Steering Assist Vehicle Stability Control (VSC+) and Traction Control (TRC)	✓	✓	✓	✓
Hill-start Assist Control	✓	✓	✓	✓
Automatic door locking	✓	✓	✓	✓
Emergency brake signal	✓	✓	✓	✓
Active high level stop lamp	✓	✓	✓	✓
<b>INSTRUMENTS &amp; CONTROLS</b>	<b>ACTIVE</b>	<b>BUSINESS EDITION</b>	<b>BUSINESS EDITION PLUS</b>	<b>EXCEL</b>
Cruise control with speed limiter	✓	✓	✓	✓
Rain-sensing windscreen wipers	x	✓	✓	✓
Dusk-sensing headlights	x	✓	✓	✓
Dusk-sensing LED headlights with Adaptive Front-lighting System	x	x	x	✓
Electronic parking brake	✓	✓	✓	✓
Tyre Pressure Monitoring System	✓	✓	✓	✓
<b>COMFORT &amp; CONVENIENCE</b>	<b>ACTIVE</b>	<b>BUSINESS EDITION</b>	<b>BUSINESS EDITION PLUS</b>	<b>EXCEL</b>
Manual air conditioning	✓	x	x	x
Automatic dual-zone air conditioning	x	✓	✓	✓
Power front windows	✓	✓	✓	✓
Power rear windows	x	✓	✓	✓
Follow-me-home headlights	✓	✓	✓	✓
Smart entry and push-button start	x	x	✓	✓
Auto-dimming rear view mirror	✓	✓	✓	✓
Remote boot release	✓	✓	✓	✓
<b>ENTERTAINMENT, INFORMATION &amp; NAVIGATION</b>	<b>ACTIVE</b>	<b>BUSINESS EDITION</b>	<b>BUSINESS EDITION PLUS</b>	<b>EXCEL</b>
Multi-information TFT display – monochrome	✓	x	x	x
Multi-information TFT display – colour	x	✓	✓	✓
Toyota Touch 2 with Go, with multimedia touchscreen control, six-speaker audio system, advanced Bluetooth, access to connected services,	x	✓	✓	x

SOS/breakdown call alert, satellite navigation and rear-view camera.				
Toyota Touch 2 with Go, with additional voice command recognition, WiFi hotspot function, 3D city mapping and rear-view camera.	x	x	x	✓
DAB digital tuner	x	✓	✓	✓
USB port and AUX-in socket	x	✓	✓	✓
<b>SECURITY</b>	<b>ACTIVE</b>	<b>BUSINESS EDITION</b>	<b>BUSINESS EDITION PLUS</b>	<b>EXCEL</b>
Remote central locking with double locking	✓	✓	✓	✓
Thatcham Category 1 alarm and immobiliser	✓	✓	✓	✓
Lockable glovebox	✓	✓	✓	✓
<b>SEATING, UPHOLSTERY AND TRIM</b>	<b>ACTIVE</b>	<b>BUSINESS EDITION</b>	<b>BUSINESS EDITION PLUS</b>	<b>EXCEL</b>
Manually adjustable front seats	✓	✓	✓	x
Power-adjustable heated front seats with memory setting	x	x	x	✓
Lumbar support on driver's seat	x	✓	✓	✓
Cloth upholstery	✓	x	x	x
Cloth upholstery with Alcantara inserts	x	✓	x	x
Leather upholstery with Alcantara inserts	x	x	✓	x
Premium leather upholstery	x	x	x	✓
One-touch flat-folding rear seats	✓	✓	✓	✓
Leather steering wheel and gear knob trim	✓	✓	✓	✓
Boot rails (Touring Sports)	x	x	x	✓
<b>EXTERIOR</b>	<b>ACTIVE</b>	<b>BUSINESS EDITION</b>	<b>BUSINESS EDITION PLUS</b>	<b>EXCEL</b>
16in steel wheels	✓	x	x	x
17in alloy wheels	x	✓	✓	x
18in alloy wheels	x	x	x	✓
Front fog lights	x	✓	✓	✓

Front fog lights with cornering function	x	x	✓	✓
LED headlights with auto-levelling	x	x	✓	✓
LED daytime running lights (individual spot array)	✓	✓	x	x
LED daytime running lights (with light guide)	x	x	✓	✓
LED rear light clusters	✓	✓	✓	✓
Colour keyed bumpers, door handles and mirrors	✓	✓	✓	✓
Electrically adjustable heated door mirrors	✓	✓	✓	✓
Electrically retractable door mirrors	x	✓	✓	✓
Rear privacy glass	x	x	✓	✓
Skyview panoramic roof (Touring Sports)	x	x	x	✓
Space saver spare wheel	✓	✓	✓	✓
Tyre repair kit (Touring Sports with Skyview roof only)	x	x	x	✓
Metallic/pearlescent paint	Opt	Opt	Opt	Opt

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