

This press pack accompanied the UK launch of the revised ninth generation Corolla in 2004. The model underwent some changes during its time on sale and these can be tracked using the Timeline feature on the ninth generation Corolla archive web page. Additional assets and information about the Corolla range can be obtained from the Toyota press office.

THE NEW TOYOTA COROLLA

SHORT STORY

Key points

- 2004 Corolla range benefits from improved styling, performance and equipment levels
- Revisions provide Corolla with broader market appeal, targeting younger drivers
- Complete redesign for hatchback models with new bonnet, grille, bumpers and lights
- New front section and lights for saloon and estate models
- New Euro IV-compliant 89bhp 1.4-litre D-4D common rail diesel engine (due 1 September 2004), replacing 89bhp 2.0-litre D-4D unit
- 1.4-litre D-4D first diesel to be offered with the option of Toyota's Multi-mode Manual Transmission (MMT)
- 1.4 and 1.6 VVT-i, 1.8-litre VVTL-i and 114bhp 2.0-litre D-4D common rail diesel engines all comply with Euro IV emissions standards
- T₃ hatchbacks redefined with new sports styling inside and out
- High performance T Sport model given new styling and improved dynamics
- Improved equipment levels on all grades
- Curtain shield airbags fitted as standard
- Front airbag cut-off switch fitted as standard
- Two-stage seatbelt warning system (light and buzzer) fitted as standard
- Air conditioning now standard on all models
- Optitron dashboard display now standard on all models
- On sale in the UK from June 14
- On-the-road prices from £11,695

THE WORLD'S FAVOURITE CAR

The Corolla was Toyota's first car designed for a world market and its success in that role has been phenomenal. Nine generations of Corolla models have achieved global sales of more than 28 million since the original saloon was unveiled back in 1966, making it the world's best-selling range by far.

The ninth generation, launched in the UK in 2002, was an important landmark in the history of the Corolla, as it was the first to be developed primarily for the European market, in terms of design, engineering and performance. It was also the first model fully to express the concept of Superior Quality that is the foundation stone of Toyota's brand DNA. The Corolla is now well established as one of Toyota's core European models, alongside Yaris and Avensis, and contributing strongly to Toyota's sustained record-breaking market performance.

INCREASED OWNER APPEAL

The Japanese principle of *kaizen* – continuous improvement – is central to Toyota's work and it is in this spirit, following extensive customer research, that the Corolla has undergone a comprehensive revision in order to deliver enhanced quality and performance and greater appeal to a wider range of drivers.

The look and 'feel' of the car are better than ever, strengthening the Corolla's perceived quality. All models feature a new bonnet, grille and 'teardrop' headlamps at the front and new lamp clusters and bumper at the rear. The T₃ hatchbacks have been given a new sporting profile in line with the flagship T Sport model, with side and rear skirts and a performance-themed interior trim. The styling changes help to give the car a lower, more purposeful stance on the road.

QUIETER, SAFER AND MORE SPORTING

The new Corolla carries its reputation as Toyota's most important car with ease. Noise, vibration and harshness (NVH) levels have been further reduced with the adoption on certain models of features such as acoustic glass for the windscreen and thicker sound-deadening materials in key areas of the body. Performance, roadholding and handling have been sharpened on the T Sport model, while equipment inside and out has been improved right across the range. Safety has been given top priority, in order to deliver a car that not only looks good, but which looks after its occupants, too.

All Corolla models feature a comprehensive airbag system which incorporates dual stage inflators for the front airbags, side and curtain shield airbags and a passenger airbag cut-off switch. The Corolla also adopts as standard a dual stage seatbelt warning system.

In order to provide extra appeal for younger drivers, the T₃ hatchback models have been given a new sporting profile, with body styling features like those seen on the T Sport and the use of carbon fibre-style interior trim.

NEW DIESEL JOINS EURO IV ENGINE RANGE

The entire Corolla engine range complies with Euro IV emissions standards and will develop later this year to include a new 89bhp 1.4-litre D-4D common rail diesel power unit. The new engine, which replaces the 89bhp 2.0-litre D-4D, will also be the first diesel to be available with Toyota's Multi-mode Manual Transmission (MMT), an electrically-operated manual gearbox that allows the driver to choose between full automatic or manual sequential gearchanges.

Aside from the new 1.4-litre D-4D, the engine range will continue to offer 1.4, 1.6 VVT-i and 1.8 VVTL-i petrol and 114bhp 2.0-litre D-4D common rail diesel units. The 1.6-litre engine is available with the option of 4-speed automatic transmission.

Corolla owners can look forward to reduced standard maintenance costs. Total maintenance time up to 62,500 miles (100,000km) has been reduced thanks to the adoption of longer life spark plugs, air filter and coolant. Plug replacement is now at 50,000 miles, filter at 40,000 miles and coolant at 90,000 miles.

RE-ENGINEERED T SPORT FLAGSHIP

The T Sport is a true flagship for the Corolla range, its design and engineering enabling it to fully exploit the performance of its 1.8 VVTL-i (Variable Valve timing and Lift – intelligent) engine, the 2002 Engine of the Year (1.4 to 1.8 category).

The development of the suspension system to incorporate performance dampers and rebound springs reinforces the car's reputation as a true sports model. Gearchange and steering feel have also been improved and the exterior design has been upgraded to convey an even sportier appearance. Similarly, the cabin has also benefited from a number of styling and equipment improvements.

UK SALES AND PRICING

The new Toyota Corolla went on sale in the UK on 14 June with the new 1.4-litre D-4D diesel engine available from 1 September. On-the-road prices start at £11,695 for the 1.4-litre VVT-i T₂ three-door hatchback model. Pricing works to a logical system: the move from three to five doors and three doors to saloon adds £500; five-door to estate adds a further £1,000. T₂ to T₃ grade adds £700 and T₃ to T Spirit £1,000. Automatic transmission on 1.6-litre VVT-i costs £1,000 and the Multi-mode Manual Transmission is a £500 option on 1.4-litre D-4D models.

Toyota Corolla model mix and on-the-road prices

BODYSTYLE	ENGINE	GRADE	OTR PRICE
Three-door	1.4 VVT-i	T ₂	£11,695
Three-door	1.4 D-4D	T ₂	£12,695
Three-door	1.4 VVT-i	T ₃	£12,395
Three-door	1.6 VVT-i	T ₃	£12,895
Three-door	1.6 VVT-i auto	T ₃	£13,895
Three-door	1.4 D-4D	T ₃	£13,395
Three-door	1.8 VVTL-i	T Spirit	£15,995
Five-door	1.4 VVT-i	T ₂	£12,195
Five-door	1.6 VVT-i	T ₂	£12,695
Five-door	1.6 VVT-I auto	T ₂	£13,695
Five-door	1.4 D-4D	T ₂	£13,195
Five-door	1.4 D-4D MMT	T ₂	£13,695
Five-door	2.0 D-4D	T ₂	£14,195
Five-door	1.4 VVT-i	T ₃	£12,895
Five-door	1.6 VVT-i	T ₃	£13,395
Five-door	1.6 VVT-I auto	T ₃	£14,395
Five-door	1.4 D-4D	T ₃	£13,895
Five-door	1.4 D-4D MMT	T ₃	£14,395
Five-door	2.0 D-4D	T ₃	£14,895
Five-door	1.4 VVT-i	T Spirit	£13,895
Five-door	1.6 VVT-i	T Spirit	£14,395
Five-door	1.6 VVT-I auto	T Spirit	£15,395
Five-door	2.0 D-4D	T Spirit	£15,895
Saloon	1.4 VVT-i	T ₂	£12,195
Saloon	1.6 VVT-i	T ₂	£12,695
Saloon	1.4 D-4D	T ₂	£13,195
Saloon	1.4 VVT-i	T ₃	£12,895
Saloon	1.6 VVT-i	T ₃	£13,395
Saloon	1.4 D-4D	T ₃	£13,895
Estate	1.6 VVT-i	T ₂	£13,695
Estate	2.0 D-4D	T ₂	£15,195
Estate	1.6 VVT-i	T ₃	£14,395
Estate	2.0 D-4D	T ₃	£15,895

All new Corolla models are protected by Toyota's 3-year/60,000-mile warranty. They also benefit from Toyota's pan-European Health & Safety schedule with major

maintenance services only every 20,000 miles. Health & Safety checks, including an oil change, are required at 10,000-mile intervals or annually.

CONCEPT AND POSITIONING

Refined Quality

THE NEW COROLLA – A PRODUCT OF *KAIZEN*

Kaizen, the Japanese word which describes a striving for constant improvement, is at the heart of the development of the new Toyota Corolla. Toyota constantly monitors its customers' needs and comments, using research and analysis to build in changes that will directly respond to the changing demands of motorists and the marketplace.

The Corolla is the most important model in the Toyota line-up. The company is happy to concede that it would not be where it is today without the contribution of the car that has been its greatest success story. Since the original model was launched in 1966, the Corolla has moved into a league of its own, with more than 28 million sales worldwide through nine different generations. With sales exceeding any other model range, the Corolla is firmly established as the world's most popular car.

That popularity continues to grow. In 2003 global sales topped 1,165,000, while in the UK the Corolla achieved new record annual sales of more than 26,400 units.

FOCUSING ON EUROPE

The importance of *Kaizen* has not diminished in the 38 years since the original Corolla was unveiled. After that time and nine different generations of the model, Toyota still wants to deliver the best possible car to its customers. The only difference is the customers it is targeting. In 1966, the original Corolla was designed to cater for the tastes of motorists' right around the world. Today the focus is on creating a car first and foremost for the Europe and subsequently developing its qualities for other world markets.

The chief engineer of the new Corolla, Mr Seiya Nakao, said: "It is a great honour to have been chosen as the chief engineer of Corolla. It represents a big responsibility as we have to take input from a broader range of markets and customers.

"Conceptually, today's Corolla is different from the one of 1966. Although the new Corolla is still marketed all over the world, it was developed with Europe in mind. If

you are able to please your most demanding customer, you're sure to have what it takes to please all the others."

Toyota's current philosophy for Corolla is that a quality car built for Europe has the potential to be successful everywhere else in the world. This principle was first applied in 2001 to the current generation model, the car which was also the first clear expression of Superior Quality, the core element of Toyota's brand DNA. As a result, the Corolla marked a quantum leap in perceived quality, design, driving pleasure and innovation compared to the previous generation model.

The new Corolla is an evolution of the 2001 model, positioned for increased appeal to young, self-assured men and women in their early 30s.

"Refined Quality" describes what the model range brings to the market. There is additional refinement from improvements in perceived quality, equipment levels and NVH performance, while other items such as the new 1.4-litre D-4D engine, MMT transmission and styling and performance revisions for the T Sport model endow the Corolla range with an even stronger image.

UK sales of the new Corolla range began on 14 June. For the rest of 2004, Toyota expects to sell 12,500 new Corolla models (excluding the Verso).

INCREASING CUSTOMER CHOICE

The new Corolla retains the current grade structure of T₂, T₃, T Spirit and T Sport. T₂ models now have manual air conditioning as standard. The profile of the T₃ hatchback models has been changed to give a more distinct sporting character. T Spirit extends further its high levels of comfort and convenience features, while the top-of-the-range T Sport delivers greater handling and driving pleasure thanks to its new dynamic tuning.

The engine range, like that of the Toyota Avensis, is fully compliant with the Euro IV emissions standards, due to come into force at the end of 2005.

The new 89bhp 1.4-litre D-4D diesel will replace the 89bhp 2.0-litre D-4D engine in the Corolla line-up and will be offered alongside the models' proven engine range. The complete range comprises:

- 95bhp 1.4-litre VVT-i petrol

- 109bhp 1.6-litre VVT-i petrol
- 189bhp 1.8-litre VVTL-i petrol (T Sport only)
- 89bhp 1.4-litre D-4D diesel
- 114bhp 2.0-litre D-4D diesel

Where diesel power is concerned, both D-4D engines will be available in the three and five-door hatchbacks. The saloon will use the 1.4-litre D-4D unit, while the estate will be available with the more powerful 114bhp 2.0-litre D-4D engine.

New Corolla will also offer four different transmissions:

- Five-speed manual
- Six-speed manual (T Sport only)
- Five-speed Multi-mode Manual Transmission (with new 1.4-litre D-4D engine only)
- Four-speed automatic (with 1.6-litre VVT-i engine only)

The range of colours has also been extended with the addition of four metallic shades new to Corolla:-

- Silver Steel
- Kielder Green
- Ixion Blue
- Alsace Granite (unique to T Sport)

EXTERIOR DESIGN

More emphatically “Toyota” than ever

Modifications to the exterior design of the Corolla give the model an even more pronounced contemporary Toyota identity. The three and five-door hatchbacks adopt styling cues from Yaris, Corolla Verso and Avensis and have a more muscular appearance. In spite of this, they boast a class-leading drag coefficient of 0.29.

The saloon and estate are refreshed with a new-look front section and new rear lights and the top-of-the-range T Sport has a meaner, sportier look with its body lowered by 20 mm.

MORE ROBUST CHARACTER

Toyota engineers and designers had a tough brief to fulfil when setting the direction for the design improvements to the ninth generation Corolla. The designers sought to achieve more robustness, without sacrificing the stylish and instantly recognisable look that defines Toyota models in Europe.

The large, “teardrop” headlights, the front bumper and valence panel, the bonnet lines to the grille and pronounced bulge above the Toyota insignia have become Toyota design trademarks. In addition, the designers redefined the shape of the T Sport to set it apart from the rest of the range as the new image leader.

STYLISH THREE AND FIVE-DOOR HATCHBACKS

The UK-built hatchback versions of the new Toyota Corolla have a commanding presence on the road thanks to a flowing line from the bonnet down to the front bumper. The upper part of the radiator grille is body-coloured, promoting a sense of unity, while lower down, the intakes have been reshaped to direct air to the intercooler or radiator and also provide a neat location for the front fog lamps.

The headlamps are an important element in the car’s “face” and the new Toyota Corolla benefits from improved designs. The distinctive lights use separate housings for different functions: high beam lamps are positioned lower than the low beam ones, with their cylindrical shape cutting into the lower line of the headlamp unit to give a sharper, more modern appearance.

New design ideas are also expressed in changes to the rear of the car. New lamp clusters are red-toned and feature two cylindrical lights units set one above the other to give a sporting look. The bumper has been made larger, adding to the robust feel and black coloured accents provide another sporting reference.

The new Corolla T Sport has further enhancements to set it apart from the rest of the range and reinforce its position as the leader of the pack. The upper surface of the front bumper is now slanted and the grille carries a larger T Sport badge. Both upper and lower grille sections have a sporting honeycomb mesh finish and the lower part grille is wider and symmetrical with the upper section, further emphasising the T Sport’s performance quality. Further details about the new T Sport can be found in section six.

PRACTICAL SALOON AND ESTATE

Both the Corolla saloon and estate models retain the generous dimensions which give them a strong road presence. They have been enhanced with new rear combination lamps in a simple, solid design which sets cylindrical forms set inside white circles, keeping the look in line with the rest of the Corolla range.

In addition to the new front grille and headlamp design seen on the hatchbacks also, the bonnet and front bumper have been redesigned to convey a stronger look. Front fog lamps, where fitted, are now set well to each side, for a sleeker appearance.

At the back the car has also been changed to incorporate new design themes with new rear lamp clusters now red-toned for a more sporting look.

INTERIOR AND EQUIPMENT

Greater refinement and safety

Across all four grades, the new Corolla has been improved with new trims and accents developed by Toyota's European design studio ED². New measures to improve NVH performance have been introduced, including an acoustic windscreen for diesel and T Sport.

Equipment levels have been upgraded across the board and a new-generation satellite navigation system has been made available, with the option of Electronic Traffic Avoidance (ETA).

Safety issues have also been addressed with improvements in both active and passive systems and equipment.

SUPERIOR QUALITY AND COMFORT ACROSS THE RANGE

Improved quality and comfort were the focus of changes to the interior of the new Toyota Corolla, with new trim materials for all grades developed by ED².

Different upholstery fabrics are used to reflect the character of each grade. T Sport models can now be specified with optional leather and Alcantara suede-effect seats, while black leather is available as an option on T Spirit models.

The new sporting character of the T₃ grade is reflected in a new blue fleck upholstery, echoing the pattern and finish of the red fleck fabric used for the T Sport models. The red theme inside the T Sport extends further to the illumination of the dashboard controls and stitching around the leather trim of the steering wheel and gear knob.

All models have been fitted with a new design steering wheel, which now adjusts for reach as well as rake. The secondary audio controls on T₃ grade and higher have been relocated from the underside of the wheel to the front face for greater ease of use. Likewise, controls for the manual air conditioning system have also been redesigned for simpler operation.

CALMER AND QUIETER DRIVING PLEASURE

Reducing noise, vibration and harshness levels is one of the principle means of increasing a vehicle's perceived quality. Toyota had made substantial improvements in NVH, in particular by adopting an acoustic windscreen. This advanced windscreen design, introduced also on the new Corolla Verso, has been fitted to diesel and T Sport models.

The acoustic windscreen has three intermediate layers instead of the single layer seen in conventional laminated screens. The middle layer is an acoustic film which reduces droning noises by lowering the glass's primary resonance. Compared to a conventional windscreen, there is an improvement in noise absorption, especially at low frequencies.

Further sound deadening is achieved in the diesel models by the addition of felt silencers in the wing liners and cowl louvers. This helps absorb the distinctive rumble produced by diesel engines. The diesels also benefit from vibration damping materials in the cowl and dash panels, large engine undercovers, sound insulating plates and new floor carpets. Hatchback versions use a new lightweight sound insulation material in the carpets and side trim in the boot.

IMPROVED EQUIPMENT LEVELS

Equipment levels have been improved on all grades. All models now feature a steering wheel with tilt and telescopic adjustment and a new steering support bracket that provides a more rigid steering feel.

Easy-to-read Optitron instrumentation and air conditioning are also now standard right across the range.

T₂ models gain colour-keyed side protection mouldings and a new wheelcap design for the 15-inch steel wheels.

The T₃ specification is extended to provide electric front and rear windows with anti-trap protection, carbon fibre-style interior trim and a body styling package with side skirts and rear bumper extensions.

The high level of comfort and convenience offered by T Spirit models now includes as standard an automatic dipping electrochromic rear view mirror and rain-sensing windscreen wipers.

Additions to the T Sport models include special leather steering wheel and gear knob trim, alloy sports pedals, T Sport scuff plates and a sports body kit.

ADVANCED SATELLITE NAVIGATION

Two advanced satellite navigation systems are offered as optional equipment on the new Toyota Corolla on certain grades.

The Toyota Satellite Navigation System (TNS) is offered as an option on T Spirit and T Sport models. The DVD-based system is the most advanced on offer in the segment and features full colour pan-European mapping, quick route search and screen scrolling capabilities. It is equipped as standard with Electronic Traffic Avoidance (ETA). ETA provides constant monitoring of information on traffic congestion, accidents and other problems. If hold-ups are detected on any programmed journey, ETA gives the driver the option of automatic rerouting to avoid trouble spots and minimise delay. The system is constantly updated, even when the navigation system is switched off.

DVD-based turn-by-turn satellite navigation with ETA and full European mapping is also available, offered as an option on T₃, T Spirit and T Sport models.

IMPROVED SAFETY

Toyota continues to raise the levels of active and passive safety systems in all its vehicles and a number of improvements have been introduced into the new Corolla range.

Curtain shield airbags are now fitted as standard on all models, in addition to the driver and passenger and front side airbags. A cut-off switch is introduced for the front passenger airbag, which allows the system to be deactivated if, for example, a child seat is in use on the passenger seat.

The cut-off switch is activated by a key, which must be removed from the "off" position in order to validate the cut-off. This prevents the airbag from being accidentally switched off. When the airbag is deactivated, an indicator light is illuminated on the centre console.

Also new to Corolla is a two-stage seatbelt warning system. This alerts the driver and front passenger if they fail to buckle-up, by means of a warning light and a buzzer. If the seatbelts remain undone, the buzzer becomes louder and more rapid.

POWERTRAINS

Performance to suit all needs

The new Corolla offers a choice of three petrol and two common rail diesel engines. These include a new 89bhp 1.4-litre D-4D diesel unit that delivers improvements in fuel consumption, exhaust emissions and NVH performance. It is also distinguished by being the first Toyota diesel to offer the option of Multi-mode Manual Transmission.

The 1.4-litre VVT-i petrol engine provides class-leading performance and the 1.8-litre VVTL-i in the Corolla T Sport boasts the highest specific power output among normally aspirated engines in its class.

NEW 1.4-LITRE D-4D ENGINE

The new 1.4-litre D-4D engine is an improved version of the diesel engine featured in the Toyota Yaris range and it replaces the previous 89bhp 2.0-litre D-4D unit. It will be available from 1 September in hatchback and saloon versions of the new Corolla. As an option, it will be offered with Toyota's Multi-mode Manual Transmission (MMT),

which gives the driver the choice of fully automatic or quick sequential manual gear selection.

The new engine matches the previous 2.0-litre unit in terms of power output, yet achieves better fuel economy and exhaust emissions in line with Euro IV requirements.

PERFORMANCE	NEW 1.4 D-4D*	PREVIOUS 2.0 D-4D
Maximum power (bhp/rpm)	89 @ 3,800	89 @ 4,000
Top speed (mph)	112	112
Acceleration 0-62mph (sec)	13.3 (14.5 MMT)	12.6
Fuel consumption, combined (mpg)	57.6 (58.9 MMT)	49.6
CO ₂ emissions (g/km)	127 (MMT 125)	154
Emissions standard	Euro IV	Euro III
Engine weight (kg)	108	180

*1.4 D-4D figures are provisional

The smaller displacement of the new engine helps to reduce internal friction and overall weight and contributes towards improved fuel economy. Compared to the 1.4-litre D-4D unit in the Yaris, this engine sees power increased from 74 to 89bhp and maximum torque raised from 170 to 190Nm. A variable nozzle turbocharger, lower compression ratio and improved injectors with six rather than five holes help to achieve the superior output, without any compromise in fuel economy.

In 2001 when the original 1.4-litre D-4D engine was launched, it was the world's first all-aluminium engine. Lightweight and compact, it also kept NVH to a minimum thanks to the use of advanced Computer Aided Engineering (CAE) in the design of the block and the common rail injection system.

Weighing in at 108kg, the engine has one of the best power to weight ratio in the 1.3 to 1.5-litre diesel class.

EFFICIENCY RAISED BY NEW COMPONENTS

The improvements achieved in the 1.4-litre D-4D engine are the result of significant changes in its components – more than 50 have been re-engineered or added.

The highly efficient Exhaust Gas Recirculation (EGR) cooler, now equipped with a catalyst, helps lower EGR temperatures at the same time as it controls exhaust gas and reduces nitrogen oxides. The EGR valve is operated by an electric step motor, rather than a pneumatic system, and a rotary solenoid-type throttle valve to give

precise EGR control. There is also a new exhaust manifold converter. These changes contributed to bringing down emissions to achieve Euro IV certification.

To improve performance, a new variable nozzle turbocharger has been introduced, delivering both fuel economy and performance. At low speeds the nozzle closes to boost intake pressure, which results in excellent torque. At high speeds the nozzle opens up to help reduce exhaust back pressure, so increasing output.

Reinforced pistons with a new combustion bowl design and improved injectors also contribute to the increase in performance.

The extra power and torque are complemented by other measures designed to maintain the engine's durability and reliability. For example, the oil pump and oil cooler have been improved to provide better lubrication and the capacity of the water pump has been increased by 10 per cent, improving engine cooling. Other items, such as the timing belt and cylinder block sub-assembly, have been strengthened.

A new NVH package has reduced NVH, with improvements to the engine cover, cylinder head cover, cylinder block side cover, oil pan cover and turbo insulator.

MULTI-MODE MANUAL TRANSMISSION IMPROVES FUEL ECONOMY

The Multi-mode Manual Transmission is being offered for the first time on a Toyota diesel. The system, a £500 option, is unique in its segment, being a manual transmission, driven by electric motors. As it has an automatic clutch, there is no clutch pedal.

MMT operates in three different modes, according to driver choice: automatic in normal or sporty mode (E and Es) and manual, in which the driver selects the gears by means of a sequential shift lever.

In E mode, MMT can reduce fuel consumption and carbon dioxide emissions by about two per cent (in EC combined cycle driving), compared to the performance of a conventional manual transmission. This is possible thanks to system software that designs the gearshift pattern to benefit fuel economy.

When Es mode is selected, the transmission makes quicker gear changes at higher revs, in order to deliver a sportier drive.

MMT models can only be started when neutral is selected and the driver has his or her foot on the brake pedal. The system has a start assist function, like that on an automatic: when the driver releases the brake pedal, the car starts to generate a small amount of driveline torque. If the driver releases the accelerator suddenly the system will hold the current gear position and if the accelerator is depressed sharply, the system will downshift to the appropriate gear.

The MMT has a special shift control that automatically detects if the vehicle is going up or downhill and adapts its operation to suit. When the car is moving uphill, the transmission will tend to hold the same gear for longer, to avoid hunting up and down the gearbox. It also monitors the brakes and prevents any upshift immediately after light braking.

The MMT is only marginally heavier than an equivalent manual transmission. Compared to an average four-speed automatic, it represents a weight saving of at least 25 per cent.

On average, the MMT system can reduce carbon dioxide emissions by at least 12 per cent, compared to a standard automatic. More than that, it also costs less than the automatic option.

POWER, PERFORMANCE AND ECONOMY

The new 1.4-litre D-4D engine develops its 89bhp at 3,800 rpm, giving the Corolla a top speed of 125mph and nought to 62mph acceleration time of 13.3 seconds (14.5 for models with MMT). Fuel consumption on the European combined cycle is 57.6mpg (58.9 with MMT) and CO₂ emissions are rated at 127g/km (including MMT).

This engine makes the Corolla one of the most fuel-efficient cars in its segment. At the same time, it is also one of the strongest performers among 1.4 to 1.5-litre C segment diesels.

The 2.0-litre D-4D, already available in the Corolla range, now features a new cooling system with a lightweight fan and improved air intake components to help reduce intake pressure loss and reduce noise and vibration. The engine develops 114bhp at 3,600rpm, providing a top speed of 116mph and nought to 62mph acceleration in

10.6 seconds. Fuel consumption on the European combined cycle is 49.6mpg with CO₂ emissions of 151g/km. This engine is also Euro IV compliant.

The three petrol engines in the Corolla range are the 1.4 and 1.6 VVT-i (Variable Valve Timing – intelligent) and the 1.8 VVTL-i (Variable Valve Timing and Lift – intelligent). The 1.4 VVT-i is the best in its class for performance and also meets Euro IV emissions regulations without sacrificing fuel efficiency or torque at lower engine speeds. It develops 95bhp at 6,000rpm. This gives it a top speed of 115mph and a nought to 62mph time of 12.0 seconds. Fuel consumption on the European combined cycle is 42.2mpg with CO₂ emissions of 159g/km.

The 1.6 VVT-i, one of the most powerful engines in its class, is equipped with an electronic throttle body. This sets the throttle valve opening to match every driving condition, improving both performance and fuel economy. A four-speed automatic transmission can be specified as a £1,000 option. The engine produces 109bhp at 6,000rpm, enabling a top speed of 118mph (109mph automatic) and nought to 62mph acceleration in 10.2 seconds (11.8 automatic). Combined cycle fuel consumption is 40.4mpg (35.8 automatic) and CO₂ emissions are rated at 168g/km (190 automatic).

The strengths of the 1.8 VVTL-i, which is used exclusively in the T Sport, were recognised in it being named International Engine of the Year 2002 (1.4 to 1.8-litre category). It is an advanced unit that benefits from Toyota's Variable Valve Timing the Lift – intelligent technology.

VVTL-i is an evolution of the VVT-i system that is already used throughout Toyota's petrol engine range. In low to mid-range, VVT-i continuously varies valve timing by advancing or delaying the movement of the camshaft up to a certain angle. From 6,200rpm, an increase in oil pressure gives the valves – activated by camshaft lobes – a more aggressive profile that increases the valve lift.

As a result, the engine is capable of revving up to 8,200rpm to maximise power. The engine sound is also stirring, reminiscent of a high-revving racing unit. The advantages of this engine are its combination of power, smoothness and fuel efficiency. While turbocharged engines usually suffer from high fuel consumption, turbo-lag and higher maintenance costs, the VVTL-i can deliver lower fuel consumption when driven in a relaxed style.

The engine produces 189bhp at 7,800rpm, the highest specific output for any normally aspirated engine in the segment. The addition of a 6-speed manual transmission makes it even easier to extract the full potential of this remarkable power unit.

T SPORT AND T₃

New sporting flair further across the range

Toyota has increased the sporting dimension of the Corolla range with style and handling changes for the flagship T Sport. In addition, the T₃ grade is comprehensively restyled to give it a new and dynamic profile that will increase its appeal to younger drivers.

BOLD CHANGES FOR T SPORT

The flagship of the new Toyota Corolla range is the T Sport, a car that offers high levels of equipment, exhilarating handling and road handling and great performance from its 189bhp engine. The original T Sport was launched in 2001; now the car has been completely reworked for even better driving dynamics and looks.

The exterior has been substantially improved. Changes to the upper part of the front bumper and a larger Toyota insignia at the front express the stronger character. In addition, the upper and lower sections of the front grille have a honeycomb mesh design for a more sporty appearance, like that of the Yaris T Sport.

The new front and rear spoilers and side skirts also promote the car's sporting nature and are not just for show: each element of the body kit plays its part in terms of improving roadholding. Aerodynamic performance is sharpened thanks to aerodynamic undercovers front and rear, unique to the T Sport, which smooth out the airflow beneath the car to help achieve excellent high speed handling and stability.

Fog lamps are now located at the outer ends of the front bumper air intakes. Larger door mirrors have been fitted, too, which improve driver vision and, due to their redesigned visor shape, create less wind noise.

Inside, the car exudes both quality and sporting character. The leather-trimmed steering wheel and gearshift are finished with red stitching which complements the red accents in the new grey upholstery fabric. Aluminium pedals and footrest plate are introduced and carbon fibre-style trim sections with the T Sport logo are built into the scuff plates. The carbon fibre look also extends to the centre instrument cluster and the switch surrounds for the electric window controls. Like the T Spirit, the T Sport now benefits from rain-sensing windscreen wipers and an electrochromic auto-dipping rear-view mirror.

New sports seats, unique to the T Sport grade, have been fitted, providing extra lateral support during high speed cornering. The dashboard now features white-faced metres with metallic bezels and sporty red illumination.

ADDED SPORTING PERFORMANCE

The new Corolla T Sport doesn't just look the part, it drives superbly, too. The 6-speed manual gearbox now has a cleaner and slicker action with a new highly rigid shift cable bracket for improve shift feel.

On the road the T Sport's manners are impeccable. Front and rear suspension have been improved with new coil springs, shocks absorbers, anti-roll bars and rebound stoppers. These changes have allowed the vehicle height to be lowered by 20mm. This is not just a cosmetic exercise in giving the car a more dynamic and sporting stance, as lowering the centre of gravity contributes to the sharper performance.

The Corolla T Sport now uses performance dampers, a first for the segment. These are struts positioned just above the suspension towers which work as dampers. The shock absorbing mechanism connected to the left and right suspension supports aids excellent steering stability and chassis rigidity as well as a comfortable ride.

T Sport models now have rebound springs added to the rear shock absorbers to help ensure excellent steering stability. Where conventional springs only work under compression, rebound springs also work on the rebound to pull the body in the right direction and stabilise the car under hard cornering. Each rebound spring is mounted inside the shock absorber.

Steering feel has also been improved. The T Sport has a lower gear ratio than standard Corolla models, which makes the steering more direct. In addition, the number of turns lock to lock has been reduced from 3.5 to 3.2.

SPORTS PROFILE FOR T₃ GRADE

Toyota decided to reinvigorate the T₃ grade three and five-door hatchbacks to appeal to younger drivers who want the look and feel of the T Sport, but at a more accessible price.

On the outside the new T₃ has plenty of street presence thanks to its dedicated 15-inch alloy wheels, side and rear skirts and front fog lamps, shared with the T Sport.

On the inside, the trim features special blue accents in a new fabric, exclusive to the grade. The interior also features carbon fibre-style inserts, like the T Sport, to enhance the modern appearance and reinforce its sporting quality. A leather-trimmed steering wheel and gear knob are also included as standard, along with a four-speaker sound system with CD player.

The new T₃ hatchbacks are available with all engines in the Corolla range, except the 1.8-litre VVTL-i.

TOYOTA COROLLA TECHNICAL SPECIFICATIONS

ENGINE 1.4-litre VVT-i	
Type	4ZZ-FE
Valve Mechanism	DOHC
Fuel System	Electronic fuel injection
Displacement (cc)	1,398
Bore x Stroke (mm)	79 x 71.3
Compression ratio	10.5:1
Maximum Power (bhp/rpm)	95 / 6,000
Maximum Torque (Nm/rpm)	130 / 4,400
ENGINE 1.6-litre VVT-i	
Type	3ZZ-FE
Valve Mechanism	DOHC
Fuel System	Electronic fuel injection
Displacement (cc)	1,598
Bore x Stroke (mm)	79 x 81.5
Compression ratio	10.5:1
Maximum Power (bhp/rpm)	109 / 6,000
Maximum Torque (Nm/rpm)	150 / 4,800
ENGINE 1.8-litre VVTL-i	
Type	2ZZ-GE
Valve Mechanism	DOHC
Fuel System	Electronic fuel injection

Displacement (cc)	1,796						
Bore x Stroke (mm)	82 x 85						
Compression ratio	11.5:1						
Maximum Power (bhp/rpm)	189 / 7,800						
Maximum Torque (Nm/rpm)	180 / 6,800						
ENGINE 1.4-litre D-4D							
Type	1ND-TV						
Valve Mechanism	DOHC						
Fuel System	Direct injection-common rail						
Displacement (cc)	1,364						
Bore x Stroke (mm)	73.0 x 81.5						
Compression ratio	17.9:1						
Maximum Power (bhp/rpm)	89 / 3,800						
Maximum Torque (Nm/rpm)	190 / 1,800-3,000						
ENGINE 2.0-litre D-4D							
Type	1CD-FTV						
Valve Mechanism	DOHC						
Fuel System	Direct injection – common rail						
Displacement	1,995						
Bore x Stroke (mm)	82.2 x 94.0						
Compression Ratio	17.8:1						
Max. Power (bhp/rpm)	114 @ 3,600						
Max. Torque (Nm/rpm)	280 @ 2,000-2,200						
PERFORMANCE	1.4L	1.6L		1.8 T Sport	1.4 D-4D		2.0 D-4D
	5 M/T	5 M/T	4 A/T	5 M/T	5 M/T	5 MMT	5 M/T
0-62mph (sec)	12.0	10.2	11.8	8.4	12.6	14.5	10.6
Max speed (mph)	115	118	109	140	112	112	116
FUEL CONSUMPTION AND EMISSIONS							
Model	Combined (mpg)		Extra Urban (mpg)	Urban (mpg)	CO₂ Emissions (g/km)		VED Band
1.4 VVT-i 3dr/5dr/saloon	42.2		49.6	33.6	159		A
1.6 VVT-i 3dr/5dr/saloon	40.4		47.9	31.4	168		B
1.6 VVT-i 3dr/5dr (Auto)	35.8		44.1	26.6	190		C
1.6 VVT-i Estate	39.2		47.0	30.7	172		B
1.4 D-4D	57.6		TBC	TBC	127		A
1.4 D-4D MMT	58.9		TBC	TBC	125		A
2.0 D-4D 5dr	49.6		58.9	38.7	151		B
1.8 VVTL-i T Sport	34.0		42.2	25.4	198		C
DIMENSIONS (exterior)	THREE-DOOR		FIVE-DOOR		ESTATE		SALOON
Overall length (mm)	4,180		4,180		4,385		4,385
Overall width (mm)	1,710		1,710		1,710		1,710
Overall height (mm)	1,475		1,475		1,520		1,470
Interior length (mm)	1,910		1,910		1,900		1,900
Interior width (mm)	1,425		1,425		1,430		1,425
Interior height (mm)	1,230		1,230		1,230		1,230
Wheelbase (mm)	2,600		2,600		2,600		2,600
Tread width (mm) front	1,480		1,480		1,480		1,480
Tread width (mm) rear	1,460		1,460		1,460		1,460
Min turning radius (m) tyre	5.1		5.1		5.1		5.1
Luggage capacity (l)	289		289		402		437
Fuel tank capacity (l)	55		55		55		55
WEIGHTS(kg)	1.4L	1.6L		1.8 T Sport	1.4 D-4D		2.0 D-4D
Kerb weight	5 M/T	5 M/T	4 A/T	5 M/T	5 M/T	5 MMT	5 M/T
Three-door	1,125-1,195	1,140-1,215	1,180-1,240	1,210-1,255	1,330	TBC	N/A

Five-door	1,135-1,205	1,140-1,215	1,190-1,250	N/A	1,280-1,340	TBC	1,350
Saloon	1,110-1,155	1,115-1,165	N/A	N/A	1,245-1,295	N/A	N/A
Estate	N/A	1170-1235	N/A	N/A	N/A	N/A	TBC
Gross vehicle weight	1.4L	1.6L		1.8 T Sport	1.4 D-4D		2.0 D-4D
Three-door	1,655	1,655	1,670	1,655			N/A
Five-door	1,655	1,655	1,670	1,655			1,780
Saloon	1,655	1,655	N/A	N/A			N/A
Estate	N/A	1,655	N/A	N/A	N/A		
SUSPENSION							
Front	MacPherson strut						
Rear	Torsion beam						
BRAKES							
Front	Ventilated disc						
Rear	Solid disc						
STEERING							
Type	Rack and Pinion – Electric Motor Assisted						
Ratio	17.4:1						
Turns (lock to lock)	3.5						
TYRES AND WHEELS							
Wheel size	15"/16"						
Tyre size	195/60VR 15 or 195/55VR 16						

TOYOTA COROLLA EQUIPMENT LIST

SAFETY	T₂	T₃	T Spirit	T Sport
Driver and passenger airbag	✓	✓	✓	✓
Driver and passenger side airbag	✓	✓	✓	✓
Curtain shield airbags	✓	✓	✓	✓
Five 3-point seatbelts with ELR (front with electronic sensing, pre-tensioner & force limiter)	✓	✓	✓	✓
Dual-stage (light and buzzer) seatbelt reminder	✓	✓	✓	✓
Child seat fixings (ISO-FIX)	✓	✓	✓	✓
Height adjustable front and rear headrests	✓	✓	✓	✓
Anti-submarining seats	✓	✓	✓	✓
De-coupling brake pedal mechanism	✓	✓	✓	✓
Side impact beams on all doors	✓	✓	✓	✓
Head impact protection structure roof side and pillar	✓	✓	✓	✓
Child proof locks on rear doors (5-door)	✓	✓	✓	✓
Anti-lock braking system with EBD	✓	✓	✓	✓
Vehicle Stability Control + Brake Assist	✗	✗	✗	3
Auto cancel rear fog lamp	✓	✓	✓	✓
Passenger airbag cut-off switch	✓	✓	✓	✓
INSTRUMENTS & CONTROLS				
Trip computer with fuel consumption/average speed display	✓	✓	✓	✓
Automatic transmission mode indicator (automatic)	✓	✓	✓	✗
Engine temperature warning	✓	✓	✓	✓
Lights on warning	✓	✓	✓	✓
Outside temperature display	✓	✓	✓	✓

Optitron instruments – white (Corolla)	✓	✓	✓	✗
Optitron instruments – red (T Sport)	✗	✗	✗	✓
Digital odometer with 2 trip meters	✓	✓	✓	✓
COMFORT & CONVENIENCE				
Power assisted steering	✓	✓	✓	✓
Stepless tilt and telescopic reach adjustable steering column	✓	✓	✓	✓
Three-spoke steering wheel	✓	✗	✗	✗
Three-spoke steering wheel with leather and audio controls	✗	✓	✓	✓
Electric front windows with “one-touch”/anti-trap and key-off function	✓	✗	✗	✓
Electric front/ & rear windows with “one-touch”/anti-trap and key-off function (five-door models)	✗	✓	✓	✗
Rain-sensing windscreen wipers	✗	✗	✓	✓
Rear wipers with intermittent function	✓	✓	✓	✓
Electrically adjustable exterior mirrors	✓	✓	✗	✗
Electrically adjustable and heated exterior mirrors	✗	✗	✓	✓
Electrochromic auto-dipping rear view mirror	✗	✗	✓	✗

TOYOTA COROLLA EQUIPMENT LIST (cont)

COMFORT & CONVENIENCE (cont)	T₂	T₃	T Spirit	T Sport
DVD based turn-by-turn satellite navigation with Electronic Traffic Avoidance (ETA)	x	Opt	Opt	Opt
Full mapping Satellite navigation with European DVD and ETA	x	x	Opt*	Opt
Remote fuel lock release	✓	✓	✓	✓
Drive and front passenger vanity mirrors	✓	✓	✓	✓
Electric tilt/slide sunroof with shade, one touch anti-trap and key off function	x	x	Hatch	x
AUDIO				
AM/FM radio with preset setting – integrated unique fit with LCD	✓	✓	✓	✓
RDS with PTY and EON	✓	✓	✓	✓
Single disc CD player	✓	✓	✓	✓
Four speakers	✓	✓	x	x
Six speakers	x	x	✓	✓
Steering wheel mounted audio controls	x	✓	✓	✓
VENTILATION				
Air conditioning (manual)	✓	✓	x	x
Air conditioning (automatic with digital climate control)	x	x	✓	✓
Air re-circulation	✓	✓	✓	✓
Pollen filter/clean air filter	✓	✓	✓	✓
SECURITY				
Remote central double locking	✓	✓	✓	✓
Transponder key engine immobiliser	✓	✓	✓	✓
Remote alarm with perimeter and microwave interior protection	Opt	Opt	Opt	✓
Security window etching linked to 24hr helpline	✓	✓	✓	✓
Vehicle parts marking – parts traceable to VIN	✓	✓	✓	✓
STORAGE				
Lockable glove box	✓	✓	✓	✓
Storage box – central tunnel and dashboard	✓	✓	✓	✓
Front seatback pocket	✓	✓	✓	✓
Cupholder – front & rear	✓	✓	✓	✓
Driver storage tray	✓	✓	✓	✓
SEATING, UPHOLSTERY & TRIM				
Driver's seat height adjustment	✓	✓	✓	✓
Driver seat memory	✓	✓	✓	✓
Driver and passenger recline and slide adjustment	✓	✓	✓	✓
Front sports seats with lateral support	x	x	x	✓
60/40 split/fold rear seat back	✓	✓	✓	✓
Cloth upholstery	✓	✓	✓	✓
Leather upholstery	x	x	Opt Hatch	Opt
Removable rear parcel shelf	Hatch	Hatch	Hatch	✓
Rear tonneau cover	Estate	Estate	Estate	x

TOYOTA COROLLA EQUIPMENT LIST (cont)

SEATING, UPHOLSTERY & TRIM (cont)	T ₂	T ₃	T Spirit	T Sport
Cloth door inserts	✓	✓	✓	✓
Leather door inserts	x	x	Opt	Opt
Leather gear shift knob	x	✓	✓	✓
Silver metallic-effect fascia	x	x	✓	x
Carbon fibre-effect fascia	x	✓	x	✓
Chrome effect door handles	✓	✓	✓	✓
EXTERIOR & BODY				
Colour keyed front and rear bumpers and door handles and mirrors	✓	✓	✓	✓
Colour keyed side protection mouldings	✓	✓	✓	✓
Sports front grille	x	x	x	✓
Colour keyed grille with chrome surround	x	x	✓	x
Colour keyed front grille	✓	✓	x	x
Sports body kit with side skirts and rear bumper extension	x	✓	x	✓
Roof mounted and colour keyed rear spoiler	Opt	Opt	Opt	✓
Roof rails	Estate	Estate	Estate	x
Front and rear fog lamps**	Rear only	✓	✓	✓
Red tone rear light cluster	✓	✓	✓	✓
Electronic headlamp levelling	✓	✓	✓	✓
15" steel wheels with full wheelcaps (locking wheelnuts optional)	✓	x	x	x
15" 5-spoke alloy wheels with locking wheelnuts	Opt	✓	x	x
15" 6-spoke alloy wheels with locking wheelnuts	Opt	Opt	✓	x
15" 7 and 10-spoke alloy wheels with locking wheelnuts	Opt	Opt	Opt	x
16" 10-spoke alloy wheels with locking wheelnuts	x	x	x	✓
16" 5-spoke alloys wheels with locking wheelnuts	Opt	Opt	Opt	x
Mudflaps	Opt	Opt	✓	✓
Full size spare wheel	✓	✓	✓	✓
Metallic paint	Opt	Opt	Opt	Opt

* not on 1.4

** Front fog lamps not available on 114bhp 2.0 D-4D models