

*This press pack accompanied the UK launch of the third generation Yaris in August 2011. Details of changes to the model during its time on sale can be tracked using the Timeline feature on the third generation Yaris archive page. Further assets and information about Yaris can be obtained from the press office.*

## **NEW YARIS**

### **New Yaris: more quality, more style and greater efficiency**

- **New Yaris builds on the model's key strengths, with a more dynamic design and improved quality**
- **Affordable multimedia connectivity with Toyota Touch and Go**
- **Efficient powertrains, innovative Multidrive S transmission and greater agility**
- **Unprecedented attention to built-in quality in every area**
- **On sale now, first UK customer deliveries in September**

The launch of the third generation Yaris opens a new chapter in the model's European success story.

The previous model won praise for its roomy interior, durability and versatility, the efficiency of its engines and its easy-to-drive character around town. New Yaris will consolidate these strengths and go further to offer sharper, contemporary styling, a step-up in quality, even greater agility and a breakthrough in affordable multimedia connectivity with Toyota Touch and Go.

Further improvements in the built-in quality that characterises Yaris are central to the new model. To help achieve this, Toyota Motor Manufacturing France (TMMF) has worked closely with its suppliers from the earliest stages of production to ensure every component contributes to the vehicle's overall quality.

Positioned at the heart of the B-segment – the most important part of the European market – new Yaris will appeal both to technology-focused customers and those motorists for whom quality, practicality and value for money are the key considerations when choosing a new car.

The UK range includes three and five-door models and four grades: T<sub>2</sub>, TR, SR and T Spirit. The choice of clean and fuel-efficient Toyota Optimal Drive powertrains includes 1.0-litre VVT-i and 1.33-litre dual VVT-i petrol units and an 89bhp 1.4-litre D-4D diesel, with five and six-speed manual transmissions and, new to Yaris, Toyota's Multidrive S continuously variable transmission (CVT).

The new Toyota Touch audio system, with touchscreen controls, is fitted as standard to all but the entry level new Yaris (T<sub>2</sub>) in the UK, additionally providing Bluetooth, a USB port and a rear-view camera. This can be upgraded to the Toyota Touch and Go system which provides full map satellite navigation, advanced Bluetooth functions and access to a range of connected information services that can be

accessed using compatible mobile phones via a dedicated Toyota customer portal.

With the benefit of a revised suspension design and electric power steering (EPS), new Yaris strikes an excellent balance of comfort and the kind of agile handling that's ideal for urban driving.

Over the past decade, Yaris has consistently achieved a share of more than five per cent of its segment, making a strong contribution to Toyota's sales across Europe, boosting its brand image and its European manufacturing operations.

Toyota expects European B-segment sales to remain stable in the immediate future at around four million units, with customers choosing to downsize from other segments in response to rising fuel prices and emissions-linked taxation. Even though this part of the market has fragmented, with the introduction of small SUVs and MPVs, the hatchback remains the segment's best-selling bodystyle, still accounting for around half of all the vehicles sold.

Orders are being taken for new Yaris now, with first deliveries to customers from 15 September.

### **All the clever Yaris DNA in a more dynamic package**

- **New Yaris inherits the clever packaging of previous generations**
- **True to the original Yaris concept of "compact outside, spacious inside"**
- **Increase in overall length limited to 100mm - Yaris remains one of the most compact models in its class**
- **More dynamic, sharper exterior design**

Since the first Yaris was launched in 1999, each successive generation of the car has been developed according to the same concept: "compact outside, spacious inside". New Yaris inherits the fundamental clever packaging of the first two generations of the car, but clothed in exterior styling that is bolder, sharper and more eye-catching.

### **Packaging**

The car's overall length is 3,885mm, just 100mm longer than the previous model, which means new Yaris remains one of the most compact models in a class where the average car length is four metres. This is reflected in a class-leading turning circle of 4.7 metres, which makes for the kind of easy manoeuvrability that is perfectly suited to city driving.

The overall width remains unchanged at 1,695mm and 50mm have been added to the wheelbase. Height has been reduced by 20mm to 1,510mm, giving the car a lower centre of gravity and a sportier stance. The short front and rear overhangs – reduced by 35 and 15mm respectively – and prominent wheel arches further emphasise the car's agility.

## **Styling**

Central to Yaris's new styling is a change in the proportions of the upper and lower grilles, with the latter rendered larger than before, anchoring the bolder front-end treatment.

The full-width, concave upper grille is flanked by new, keen-edged horizontal headlights, which have a slim design that incorporates dual lamps and, on the sports-themed SR grade models, smoke-finished 'eyebrow' plates, which emphasise the stronger, horizontal lines of the new car's styling.

A protruding centre section in the lower bumper houses a large air intake, projecting the car's low centre of gravity and giving it a ground-hugging appearance.

While maintaining the classic Yaris 'Y' graphic, these new styling elements combine to give the car a bolder and more masculine look.

In profile, new Yaris's dynamic qualities are expressed in a more prominent, steeply sloping beltline, while the base of the A-pillar has been moved forwards to strengthen the cab-forward look. The increase in the rake of the windscreen helps improve the car's drag coefficient to a class-leading Cd 0.287.

Front and rear three-quarter visibility have been improved by introducing a larger front quarterlight and taking away the vertical bar that divided the rear side windows, which also gives the glazing a smarter look. Three-door versions have a thinner, forward-slanting C-pillar, which increases the rear glazing area, adding to the car's more dynamic appearance.

The smooth flow of the beltline around the rear shoulders, an extended lower bumper and a "Coke-bottle" silhouette combine to give the vehicle a wider, more stable stance, while a flowing character line along the door sills and aero corner treatments front and rear further emphasise the car's low centre of gravity and long wheelbase profile.

At the rear the detailing of the lamp clusters, the top-hinged tailgate inset into the bumper and the treatment of the lower bumper are all visually interlinked, again maintaining Yaris's trademark 'Y' graphic. Setting the number plate higher beneath a chrome bar trim adds a premium touch to the design execution.

New 15 and 16-inch alloy wheel designs are available for new Yaris, and there is a choice of 10 exterior colours. Six shades are new to the range and two – Deep Aqua and Burning Red – are completely new.

## **Aerodynamics**

Aerodynamic efficiency is fundamental to a vehicle's overall fuel efficiency, and to this end every element of new Yaris's bodywork has been styled to optimise airflow and minimise drag.

The upper and lower front grilles are sized to achieve the best possible cooling, and shaped to smooth

the flow of air into the engine bay. The profiles of the front and rear bumper aero corners, the bonnet, A-pillars, door mirrors, roofline and even the rear combination lamps have been designed to maximise aerodynamic efficiency.

In addition, numerous underbody components have been fitted to smooth the airflow, including a front spoiler, full engine undercover, front, centre and rear spats and a rear undercover with NACA fins.

Together these comprehensive airflow management measures significantly improve the car's aerodynamic performance, giving new Yaris a class-leading drag coefficient of Cd 0.287.

### **Interior designed for space, comfort and an improved driving position**

- **Interior space maximised with class-leading rear knee space and loadspace length**
- **More driver-focused cockpit with new emphasis on ergonomic excellence**
- **Improved driving position**
- **Panoramic glass roof, standard on T Spirit models**

#### **All-new interior**

The principal design goal for new Yaris's interior was to create a more driver-focused cockpit with a symmetrical layout. This can be seen in the clear division between the driver and front passenger spaces, emphasising the focus on the ergonomics of the driving position.

The dashboard has strong horizontal lines to create a feeling of width, and is dominated by a sculpted, soft-padded section which flows away from the driver's space into matching upper door panel pads, increasing the sense of space and reinforcing the high quality feel of the interior. The larger quarterlights also add to the sense of light and space in the cabin.

The perception of quality in terms of appearance and touch is further heightened by the use of highly tactile, premium detailing: the driver's instruments, multimedia touchscreen and air vents are trimmed in a gun metal finish, while all the controls and switchgear have chrome-plated detailing.

In a novel touch, the grained texture of the dashboard and door panels decreases in density from left to right, giving the impression of lateral expansion, and an individual bubble motif is used in the finish of the audio speaker grilles.

#### **Driver-focused cockpit**

In new Yaris the instrument binnacle has been repositioned from the centre of the console to behind the steering wheel, with all driver controls and switchgear positioned to be easy to read and operate. The new combination meter has a large central speedometer and is backlit in amber/red.

The three-spoke steering wheel – trimmed with perforated leather on all bar the entry level T<sub>2</sub> model – has a more comfortable grip and a flat bottom section. The rake of the steering column has been set three degrees lower, contributing to a more engaging driving position.

The front seats have an entirely new framework, with better body-holding performance and comfort. The seat cushions are wider and have higher side sections, there is a larger seating surface area and the front edge of the cushions has been raised to help combat fatigue on long journeys.

The vertical adjustment of the driver's seat has been increased by 15mm to a maximum 60mm, and although the sliding range remains 240mm, the adjustment increments have been reduced to just 10mm so that a comfortable driving position can be more precisely set.

### **Interior packaging**

Despite new Yaris's compact exterior dimensions, passenger accommodation is not compromised. The wheelbase has been increased by 50mm and interior width by 30mm, and, although the cabin length is unchanged at 1,810mm, the amount of interior space available within that length has increased by two per cent to 65 per cent.

Without affecting comfort or safety, the front and rear seatbacks have been made thinner. This helps increase rear passenger kneeroom by 35mm to a class-leading 645mm, and, although the ceiling is 5mm lower, there is no change in Yaris's class-best rear seat headroom. The 865mm front to rear hip point couple distance is one of the longest in the B-segment.

The front seats in the three-door Yaris have an easy entry walk-in mechanism operated by a lever on the seat shoulder. The passenger seat simultaneously tilts and slides forwards and has a full memory function that lets it return to its previous position. The driver's seat has a recline angle memory.

By making the tailgate lock and catch mechanism small and lighter, an extra 96mm has been gained in the overall loadspace length, which has increased in total by 145mm to a class-leading 710mm. With the rear seats folded flat, the length is longer by 85mm at 1,500 compared to the previous generation model. The loadspace width has also been increased, by up to 55mm to a segment-best maximum of 1,365mm.

Overall luggage capacity in the two-tier boot has risen to 286 litres (loaded to the window line, 347 litres loaded to the roof); when the rear seats are folded flat, the area will hold 768 litres. Setting the dual-position deckboard at the upper level creates a concealed storage compartment that is 633mm long, 1,006mm wide and 120mm deep. For easier loading, the tailgate is 20mm wider than on the previous model.

The spaciousness and quality of the interior is reinforced on T Spirit models by a new, all-glass panoramic roof, fitted as standard.

## **Comfort and convenience**

Every cabin function was considered in detail to ensure ease of use and comfort.

For example, new Yaris has an improved door closing system with a three-step mechanism that has intermediate holding positions at 25 and 37 degrees – something that is particularly useful in typical tight urban parking places. The door itself has been designed to require less effort to close. The smart entry and start system on the T Spirit models now features a black push switch with a fully integrated touch sensor.

The twin wipers of the previous Yaris are replaced by a single blade that gives better clearing performance at high speeds and generates less wind noise thanks to a lower blade height and a fin cover (which also improves aerodynamics). Screen wash is dispensed along the entire length of the blade, so forward vision is less obscured when cleaning the screen.

Dual-zone automatic air conditioning is available for the first time in Yaris, provided as standard on the T Spirit grade. The glovebox is also ventilated, in line with the climate control temperature settings.

Storage points around the cabin are tailored for everyday family needs, including six drinks holders (including a one-litre bottle holder) and 13 other compartments, such as a glovebox, hidden in-dash document holder, dashboard and centre console bins, front and rear door pockets and a concealed storage space beneath the deckboard in the boot.

## **NVH measures**

Toyota has taken a variety of measures to minimise wind, road and engine noise and ensure a quiet cabin environment in new Yaris.

In a first for the model, a sound-insulating acoustic windscreen is fitted, that has an inner layer of film between the sheets of glass. Strategic location of air spats, the aerodynamic efficiency of the new door mirrors and the use of a single windscreen wiper blade system further combat wind noise.

Sound-insulating and absorbing materials are used extensively throughout the bodyshell and interior construction. Applying a high density insulator to the bonnet helps reduce the transmission of noise from the engine compartment, together with a high density engine undercover silencer, front wing insulation and – another first for Yaris – a cowl insulator.

A front wing protector has been fitted between the wing and A-pillar to further reduce the amount of noise transmitted to the cabin. Insulation in the wheelarches and a lower rocker protector both help reduce the spatter noise from loose material kicked up from the road surface.

A sound absorbing/insulating inner silencer in the dashboard further diminishes the level of engine noise heard in the cabin. Comprehensive noise-inhibiting measures in the cabin include the use of damping

sheets through the floor and application of sound insulating/absorbing materials to the instrument panel, centre console, transmission tunnel, door and luggage compartment trims, headlining, carpeting and loadspace floor.

In addition, foam and fixed foam insulation materials are used in the pillars, door sills and head sections to minimise the transmission of noise through the bodyshell.

### **Efficient, lightweight engines and transmissions**

- **New Yaris available with Euro 5-compliant 1.0 and 1.33-litre petrol and 1.4 D-4D diesel engines**
- **Toyota Optimal Drive technologies improve fuel consumption and CO<sub>2</sub> emissions without diminishing power and torque levels**
- **New Multidrive S transmission with seven-step sequential manual override**
- **Multidrive S, one of the most fuel-efficient automatic transmissions in the petrol B-segment**

New Yaris continues with the successful mixture of powertrains featured in the previous generation model: 1.0 and 1.33-litre petrol units and a 1.4-litre D-4D turbodiesel.

All the engines benefit from the application of Toyota Optimal Drive, a range of engineering and technology measures designed to maximise performance and driving pleasure, while minimising fuel consumption and CO<sub>2</sub> emissions. This, combined with weight-saving measures and aerodynamics improvements, helps cut fuel consumption and emissions without harming power and torque levels.

All three engines have a lightweight and compact design and deliver the kind of power and torque performance that is ideal for around-town driving. All meet Euro 5 emissions standards.

### **1.0-litre VVT-i petrol engine**

Toyota's three-cylinder 1.0-litre VVT-i petrol, is a textbook example of miniaturisation and remains a reference point for compact, efficient engineering. The lightest unit in its class, it has been a multiple winner in sub-1.0-litre category in the annual International Engine of the Year Awards.

Mated to a five-speed manual transmission, the latest version of the 998cc unit generates 68bhp at 6,000rpm and maximum torque of 93Nm at 3,600rpm. Combined cycle fuel consumption has been improved by four per cent to 58.9mpg and CO<sub>2</sub> emissions are down by seven per cent to 111g/km.

### **1.33-litre Dual VVT-i petrol engine**

The 1.33-litre petrol engine is equipped with dual VVT-i (variable valve timing – intelligent), exhaust gas recirculation (EGR) and a remarkably high 11.5:1 compression ratio.

Fitted as standard with a six-speed manual transmission, it generates 98bhp at 6,000rpm and, at the peak of a gentle torque curve, 125Nm at 4,000rpm. Combined cycle fuel consumption is 52.3mpg (51.4mpg for

the Yaris SR with 16-inch wheels) and CO<sub>2</sub> emissions are 123g/km (127g/km SR).

When matched to the new Multidrive S transmission (see p22), combined fuel economy is 55.4mpg and CO<sub>2</sub> emissions are 118g/km (53.3mpg and 121g/km SR models).

The engine is light and compact, with a small bore and long stroke that give a very high power-to-weight ratio. It has a resin cylinder head cover and intake manifold, and a streamlined intake channel that smooths airflow for better combustion efficiency.

By using camshaft roller rocker arms, a very compact oil pump and fewer ribs on the auxiliary belt, engine friction losses are reduced, thus improving fuel economy. Control of the dual VVT-i and EGR systems has been integrated, which also improves combustion efficiency.

Dual VVT-i helps boost response levels across the entire rev range by varying the air-fuel intake and exhaust valve timing to suit the driving conditions at any given time. As well as improving torque at low and medium engine speeds, the system also reduces exhaust emissions.

EGR reintroduces precise amounts of cooled exhaust gas into the intake system. This not only reduces engine pumping losses by reducing intake vacuum pressure, it also lowers engine operating temperatures by 40°C, minimising the situations where fuel enrichment is necessary to protect the catalytic converter from overheating damage.

## **Multidrive S**

Toyota's latest continuously variable transmission (CVT), Multidrive S, is available as an option with the 1.33-litre engine. It features a manual override, sequential seven-step mode that the driver can operate using either the gearshift lever or paddle shifts on the steering wheel. Compact and lightweight, it is one of the most fuel-efficient automatic transmissions in the petrol B-segment.

Multidrive S operates within a wider band of gear ratios than a conventional transmission, which allows both for better acceleration from standstill and improved fuel efficiency at cruising speeds. Its advanced control systems incorporate Flex Lock-up Control, Flex Start Control, Lock-up Slip Control and Speed Ratio Control to achieve the best possible fuel efficiency, minimise noise and deliver a better driving experience.

- Flex Lock-up Control continuously adjusts the degree of lock-up in the torque converter. This control function optimises the transmission's balance of torque delivery and fuel economy. It allows the engine to deliver the greatest fuel efficiency, while minimising vibration, even at low vehicle speeds.
- When pulling away from standstill, Flex Start Control reduces the vehicle speed at which torque converter lock-up is possible from 9.3 to just 6.2mph (15 to 10km/h) This minimises torque waste, giving optimum acceleration from lower engine revs for improved fuel economy.
- When coasting or decelerating, Lock-up Slip Control improves freewheeling efficiency by increasing the



duration of fuel shut-off. When the car is stationary in D mode, a neutral control will temporarily disengage the transmission from the engine to minimise fuel consumption when idling.

- Speed Ratio Control incorporates a number of systems which not only work to improve fuel efficiency, but also deliver a more rewarding driving experience. Uphill/downhill shift control takes information from various vehicle sensors to determine whether the car is travelling up or downhill. When driving uphill, speed ratio changes are restricted to ensure smooth progress. If brake pedal use is detected when travelling downhill, the speed ratio is automatically adjusted to provide appropriate engine braking force.

Switching to Sport mode aligns engine and vehicle speeds more closely, giving a more linear feel to the acceleration, like a conventional manual. Sport mode sharpens acceleration performance and gives a more dynamic driving experience.

### **1.4-litre D-4D diesel engine**

The 1.4-litre D-4D common rail, intercooled turbodiesel engine uses the latest piezo-electric injection technology and is fitted as standard with a diesel particulate filter (DPF). Matched to a six-speed manual transmission, it produces 89bhp at 3,800rpm and maximum torque of 205Nm between 1,800 and 2,800rpm. For new Yaris, combined cycle fuel economy has been improved by seven per cent to 72.4mpg and CO<sub>2</sub> emissions are six per cent lower at 104g/km.

Operating at a high pressure of 160mPa, the piezo-electric fuel injectors can supply larger and more precise volumes of diesel at twice the speed of conventional fuel injectors. Because they operate at high speed, they can deliver multiple injections per combustion cycle, optimising the combustion process for responsive performance, better fuel efficiency and lower emissions.

The latest version of this reliable diesel engine is fitted with a two-stage oil pressure control system and a long-life coolant (LLC) by-pass system to reduce circulation flow rate in cold conditions, improving warm-up performance and, hence, fuel efficiency.

### **Eco Driving and Gear Shift indicators**

Versions of new Yaris equipped with Multidrive S feature an Eco Driving Indicator in the instrument binnacle, to help drivers adopt a more eco-efficient driving style. Under eco-driving, the indicator lights up under acceleration to show the most fuel efficient zone; if throttle use exceeds this zone, the light goes out.

On manual models, a Gear Shift Indicator prompts the driver to shift up or down a gear to achieve the best fuel efficiency. Monitoring driving conditions, vehicle speed and throttle inputs, this system can help reduce fuel consumption by between 0.5 and three per cent, depending on driving styles.

## **Greater agility, improved steering feel and improved ride comfort**

- **20kg saved in high rigidity bodyshell for improved agility and handling precision**
- **Revised MacPherson front struts and rear torsion beam suspension**
- **Improved Electric Power Steering (EPS) for better steering feel and faster response**
- **Increased servo assistance for more powerful braking and improved pedal feel**

New Yaris has been engineered to deliver improvements in every aspect of driving, with a focus on agile performance around town and safe, predictable handling.

The body structure is both more rigid and more aerodynamically efficient. The front track is 15mm wider than on the previous model, and numerous weight-saving measures have helped make the car more agile.

Toyota has modified the proven MacPherson strut front and torsion beam rear suspension designs, revised the Electric Power Steering (EPS) and tuned the throttle characteristics, transmission and differential gear ratios.

## **Body structure**

Extensive use of high tensile steel in new Yaris's construction – about 50 per cent by weight of the bodyshell – saves weight and delivers greater rigidity, contributing to the car's stable handling. The 5kg reduction in weight compared to the previous model has been achieved with no loss of torsional stiffness.

To improve the bodyshell's aerodynamic efficiency, a series of features have been incorporated to create a flat surface on the car's underbody to smooth the flow of air, as detailed in section 2 of this press pack.

## **Weight saving**

Even though new Yaris is slightly longer than its predecessor and carries more safety equipment, it is 20kg lighter, which makes for more nimble performance, particularly in around-town driving.

As explained above, the bodyshell is 5kg lighter thanks to extensive use of high tensile steel, while the new lightweight rear seat design accounts for a further 5kg. Using aluminium in place of steel for a number of the suspension components reduces vehicle weight by another 3kg.

Other measures include: -

- Replacing copper wiring with aluminium in 53 electrical circuits, which reduces the wiring loom mass by 38 per cent.
- Using a starter motor that is 30 per cent lighter.
- A smaller, lighter tailgate lock and latch.
- A plastic fuel filler pipe and turbo air tube (1.4 D-4D engine).
- A thinner instrument panel construction

## **Suspension**

New Yaris uses independent, MacPherson strut front suspension system which delivers high levels of ride comfort, agility and grip, and a class-leading 4.7-metre turning circle.

As part of the all-round endeavours to reduce weight, the revised system replaces the solid anti-roll bar and steel strut bearing and stabiliser link of the previous model with a hollow anti-roll bar, plastic strut bearing and an aluminium stabiliser link. These revisions also improve the suspension's road tracking performance.

To improve system performance, a shock absorber 'initial valve' has been adopted, to improve damping force response. On the sportier SR grade model, a rebound spring is introduced to reduce roll, while on all versions a change has been made to the lower arm bush characteristics. Together, these revisions reduce vibration and give a smoother ride, while improving steering feel and yaw response.

At the rear, weight saving measures including using aluminium instead of steel for the torsion beam inner tube, and a high tensile material for the coil spring. Changing the torsion beam bush characteristics and an increase in spring lateral direction have combined to improve the system's performance, again cutting vibration and giving a more comfortable ride.

## **Steering**

New Yaris's EPS offers variable assistance to make for easier manoeuvring in urban driving, combined with optimum weight and feel when driving at speed.

For a more engaging driving position, the steering column rake has been reduced by three degrees to 25 degrees, and for a better steering feel and vehicle response, a quicker steering gear ratio has been adopted. The bearing rigidity of the rack and pinion gearing has also been improved to reduce friction and system play, further improving accuracy and feel.

To maintain ease of steering at the same time as using a quicker gear ratio, the EPS's motor power output has been increased from 55 to 70A.

## **Brakes and Tyres**

New Yaris is equipped with the latest braking and stability systems and is equipped across the board with ABS, EBD, BA and VSC with TRC (as explained in section 6 of the press pack).

At the front there are 258 x 22mm ventilated disc brakes, with 203mm drums at the rear. The braking system uses a latest-generation nine-inch brake booster, stronger servo assistance and a lightweight, highly rigid brake pedal made from thin, plasma welded plates, giving better pedal feel.

Newly developed ultra-low rolling resistance tyres support fuel efficiency while delivering excellent grip with

no impact on the vehicle's stopping distance. Their reduced vertical stiffness further supports ride comfort.

Fifteen-inch wheels are fitted with 175/65R15 tyres which have a reduced rolling resistance coefficient, contributing to lower fuel consumption. The 16-inch wheels on the SR models are fitted with 195/50R16 tyres.

### **Designed to meet the highest safety standards**

- **Targeting a five-star Euro NCAP safety rating**
- **Impact absorbing body and improved pedestrian protection performance**
- **Seven airbags fitted as standard, including dual-chamber front passenger side airbag**
- **Whiplash Injury Lessening (WIL) front seats**

Just like its predecessor, new Yaris has been designed to offer the highest levels of active, passive and pedestrian impact safety performance, with the potential to secure the top, five-star Euro NCAP safety assessment rating.

New Yaris has a lightweight yet highly rigid, impact-absorbing bodyshell, of which 50 per cent (by weight) is made of high tensile steel. The body has been designed to efficiently disperse front, side and rear collision energy, helping reduce deformation of the cabin.

In a frontal collision, cabin deformation is suppressed by the absorption and dispersal of impact loads from the front bumper through the front side members, A-pillars, rocker panel and underbody structure.

Three specific measures improve side impact performance: -

- High tensile steel is used for the outer side of the B-pillars, roof rails and rockers and upper B-pillar door hinges.
- Bulkheads have been installed inside the rockers to ensure impact loads are transferred efficiently and suppress rocker breakage.
- Impact energy-absorbing beams are located in the doors.

At the rear, bumper reinforcements and a crash box absorb collision energy from a rear impact.

### **Pedestrian protection**

Numerous features strengthen new Yaris's pedestrian protection performance. Energy absorbing materials on the leading edge of the front bumper reinforcement and the bottom end of the bumper help reduce the impact energy directed at a pedestrian's legs in the event of a collision.

The energy-absorbing, pantograph bonnet structure has a crushable cowl louvre on its rear edge, and the front wings contain an impact-absorbing bracket. Fitting a low-impact bonnet hinge prevents the hinge arm

from impacting on the body in a collision, and further protection is provided by mounting the wiper pivot on a detachable structure.

### **Seven airbags as standard**

All versions of new Yaris are fitted as standard with seven airbags: driver and front passenger front and side airbags, driver's knee airbag and full-length curtain shield airbags.

The front passenger side airbag has a dual-chamber design. Each 'cushion' has a larger capacity, eight litres for the thorax/abdomen and 4.5 litres for the pelvis, and deploys with staggered timing.

Three-point ELR (emergency locking retractor) seatbelts are fitted to all seats, with additional pretensioners fitted to the driver and front passenger seats. ISOFIX mounts are provided on the outer rear seats for secure fitting of child seats, together with a top tether anchor bar.

### **Whiplash Injury Lessening seats**

New Yaris is fitted with Toyota's Whiplash Injury Lessening (WIL) front seats, which reduce whiplash injuries in rear-end collisions. The latest revision to the WIL system provides stronger seat frames that can absorb higher impact speeds, and a revised shape for the head restraints to offer a better balance of comfort and protection.

In the event of a rear impact of sufficient force, the seat structure allows the occupant's body to sink backwards, matching the movement of the upper body to that of the head, so reducing the risk of whiplash.

### **Active safety systems**

As standard, all versions of new Yaris are equipped with a comprehensive array of active safety systems: ABS, Electronic Brakeforce Distribution (EBD), Brake Assist and Vehicle Stability Control (VSC) with Traction Control (TRC).

A VSC Off function is available, which lets the driver select normal, TRC Off and VSC Off modes.

## **Grade structure, equipment and pricing**

- **Four grades – T<sub>2</sub>, TR, SR and T Spirit**
- **Toyota Touch system, plus Bluetooth and rear-view camera, standard on all bar T<sub>2</sub> entry-level model**
- **Optional upgrade to Toyota Touch and Go, an affordable multimedia package offering access to connected information services, downloadable from dedicated Toyota customer portal**

New Yaris is available in the UK in four grades – T<sub>2</sub>, TR, SR and T Spirit – which deliver an emphatic combination of high specification, quality and great value for money. Cars are available to order now, with first deliveries to customers from mid-September.

The heart of the range is the TR. Expected to command two thirds of new Yaris sales, it is available with all engine and transmission combinations, in three and five-door bodystyles.

### **Key features of the TR include: -**

- 15-inch alloy wheels
- Air conditioning
- Toyota Touch with touchscreen audio controls, Bluetooth and rear-view camera
- Leather steering wheel and gear knob trim
- Colour-matched door mirrors
- See-me-home headlights
- Vehicle Stability Control (VSC) with Traction Control (TRC)
- Seven airbags

The SR, available exclusively with the 1.33-litre Dual VVT-i petrol engine, has a sportier profile with a range of interior and exterior styling elements.

### **Equipment highlights of the SR include: -**

- 16-inch alloy wheels
- Rear roof spoiler
- Front fog lamps
- Toyota Touch with touchscreen audio controls, Bluetooth and rear-view camera
- Part-leather upholstery
- Rear privacy glass
- Front footwell illumination
- Darkened headlamp covers
- Smoked chrome exterior trim
- Sports suspension

T Spirit focuses on premium features and is available in five-door format with the 1.33-litre Dual VVT-i petrol engine.

**Principal equipment of the T Spirit grade includes: -**

- Panoramic glass roof
- Dual-zone climate control
- Front fog lamps
- Toyota Touch with touchscreen audio controls, Bluetooth and rear-view camera
- Automatic headlights and windscreen wipers
- Auto-dimming rear-view mirror
- Smart Entry and Start
- Vehicle Stability Control (VSC)

**Toyota Touch and Go**

The Toyota Touch system, standard on new Yaris TR, SR and T Spirit, in itself offers advanced connectivity, with a full colour touchscreen for audio, telephone and Bluetooth controls.

With a simple upgrade to Toyota Touch and Go, it can offer owners much more as an affordable multimedia package that opens up a host of on-board information and entertainment services.

**Toyota Touch includes the following features: -**

- Six-speaker audio system
- Radio, CD player and MP3/WMA digital file player
- Bluetooth for hands-free phone operation and audio streaming
- Automatic phonebook download
- USB port for MP3 player/iPod connection
- 6.1-inch touchscreen
- Rear-view camera

Upgrading to the optional Toyota Touch and Go introduces these additional features and functions (access to some services will require a compatible mobile phone, data plan and tethering, and registration): -

- Full map satellite navigation
- Advanced Bluetooth
- Speed and safety camera alerts
- Google local search function
- Ability to connect with local information services, such as live parking information, petrol prices and weather reports

Toyota Touch and Go provides pan-European satellite navigation with a range of associated features for more efficient and informed journey planning, including: -

- The option of an “eco-route” in addition to quickest and shortest distance journey planning
- Customisable points-of-interest (POI), allowing the driver to include their own POI
- Database of around six million POI locations
- Stopover function – route will resume automatically following a break in a journey
- Motorway-style signposting
- Premium live traffic information

The system also comes with advanced Bluetooth which, in addition to hands-free phone use and wireless audio streaming from compatible phones and devices, allows users to send and receive SMS via the touchscreen. It also enables integration between the navigation and user’s phonebook, allowing stored addresses to be set as route destinations.

Using a compatible mobile phone, owners will have access to Google Local Search and to weather and fuel price information along their route. Upgrades for system content, software and mapping and downloads of other, optional services will be available for mobile phone downloading via a dedicated Toyota customer portal.

## PRICES

MODEL	ENGINE	OTR PRICE
T <sub>2</sub> 3dr	1.0 VVT-i 5MT	£11,170
T <sub>2</sub> 5dr	1.0 VVT-i 5MT	£11,670
TR 3dr	1.0 VVT-i 5MT	£12,260
TR 3dr	1.33 Dual VVT-i 6MT	£12,760
TR 3dr	1.4 D-4D 6MT	£14,260
TR 5dr	1.0 VVT-i 5MT	£12,760
TR 5dr	1.33 Dual VVT-i 6MT	£13,260
TR 5dr	1.33 Dual VVT-i 6MT MDS	£14,260
TR 5dr	1.4 D-4D 6MT	£14,760
SR 3dr	1.33 Dual VVT-i 6MT	£13,335
SR 5dr	1.33 Dual VVT-i 6MT	£13,835
SR 5dr	1.33 Dual VVT-i MDS	£14,835
T Spirit 5dr	1.33 Dual VVT-i 6MT	£14,385
T Spirit 5dr	1.33 Dual VVT-i MDS	£15,385

## Warranties

New Yaris is protected by Toyota’s five-year/100,000 new vehicle mechanical warranty, a 12-year anti-corrosion and perforation warranty and a three-year paintwork warranty.





## **Maintaining and improving built-in quality at TMMF**

- **Sustaining Yaris's reputation for quality**
- **New Yaris project development at TMMF started 18 months earlier than for any previous model**
- **Early engagement and collaboration with suppliers to ensure quality**

Toyota Motor Manufacturing France (TMMF) has been building Yaris for 10 years and has played a crucial part in building the model's reputation for quality, durability and reliability.

The new Yaris project was based on three key elements at TMMF: -

- Points for improvement identified and incorporated into the development programme at a very early stage
- A smooth transition of TMMF members to the new Yaris assembly operation
- Continuous improvement of quality in the manufacturing processes, true to Toyota Production System principles

TMMF engineers were involved in the development of new Yaris for three years before the start of production – 18 months longer than for the previous generation model. The manufacturing and quality departments sent engineers to Japan to spend up to 18 months studying and providing feedback to help improve the vehicle design, with the aim of minimising production quality issues.

TMMF also focused on making sure every part was designed to achieve consistent quality in repeat manufacturing, allowing for greater control of both precision of fit and build quality. This will be central to achieving a high level of customer satisfaction with new Yaris.

The company also set up cross-functional working groups that looked at design, quality, suppliers and production, with the aim of reviewing critical processes to guarantee the built-in quality of the car's braking, acceleration and steering, and to identify risk points for fuel leaks and fires. This also improves the general awareness of quality issues among the production workforce, as well as strengthening warranty management and the critical process audit.

Direct involvement of suppliers in preparations for new Yaris production has also been crucial to the achievement of the highest quality levels. Toyota engineers were based at strategic supplier factories to share know-how and help raise quality standards. For new parts, Toyota provided suppliers with early designs to achieve simultaneous engineering, and sent parts tracking teams to production centres to ensure quality milestones were achieved and solve any problems well ahead of the start of production.

Each supplier visited TMMF on a regular basis before and during assembly trials for new Yaris, giving plenty of opportunities for discussion, design reviews and trial parts fitting to identify any potential problems.

## Toyota Yaris technical specifications

<b>Toyota Optimal Drive 1.0-litre VVT-i petrol</b>				
Code	1KR-FE			
Type	In-line transverse 3-cylinder			
Valve mechanism	DOHC 12-valve VVT-i			
Bore x stroke (mm)	71.0 x 84.0			
Displacement (cc)	998			
Compression ratio	10.5:1			
Max power (bhp/kW @ rpm)	68/51 @ 6,000			
Max torque (Nm @ rpm)	93 @ 3,600			
<b>Toyota Optimal Drive 1.33-litre Dual VVT-i petrol</b>				
Code	1NR-FE			
Type	In-line transverse 4-cylinder			
Valve mechanism	DOHC 16-valve Dual VVT-i			
Bore x stroke (mm)	72.5 x 80.5			
Displacement (cc)	1,329			
Compression ratio	11.5:1			
Max power (bhp/kW @ rpm)	98/73 @ 6,000			
Max torque (Nm @ rpm)	125 @ 4,000			
<b>Toyota Optimal Drive 1.4-litre D-4D 90 diesel</b>				
Code	1ND-TV			
Type	In line transverse 4-cylinder			
Valve mechanism	SOHC 8-valve			
Bore x stroke (mm)	73.0 x 81.5			
Displacement (cc)	1,364			
Compression ratio	16.5:1			
Max power (bhp/kW @ rpm)	89/66 @ 3,800			
Max torque (Nm @ rpm)	205 @ 1,800 – 2,800			
<b>PERFORMANCE</b>	<b>1.0 VVT-i 5 M/T</b>	<b>1.33 Dual VVT-i 6 M/T</b>	<b>1.33 Dual VVT-i MDS</b>	<b>1.4 D-4D 6 M/T</b>
0-62mph (sec)	15.3	11.7	12.3	10.8
Maximum speed (mph)	96	109	109	109
<b>FUEL CONSUMPTION*, EMISSIONS* &amp; VED</b>	<b>1.0 VVT-i 5 M/T</b>	<b>1.33 Dual VVT-i 6 M/T</b>	<b>1.33 Dual VVT-i MDS</b>	<b>1.4 D-4D 6 M/T</b>
Combined (mpg)	58.9	52.3 (51.4 SR)	55.4 (53.3 SR)	72.4
Urban (mpg)	48.7	41.5	45.6 (44.8 SR)	58.9
Extra Urban (mpg)	65.7	62.7 (60.1 SR)	62.8 (61.4 SR)	80.7
CO <sub>2</sub> emissions (g/km)	111	123 (127 SR)	118 (121 SR)	104
VED band	C	D	C (D-SR)	B
Insurance groups	4E to 11E			
<b>DIMENSIONS</b>				
Overall length (mm)	3,885			
Overall width (mm)	1,695			
Overall height (mm)	1,510 (1,500 SR)			
Wheelbase (mm)	2,510			
Track width – front (mm)	1,465			
Track width – rear (mm)	1,460			
Overhang – front (mm)	790			
Overhang – rear (mm)	585			
Interior length (mm)	1,915			
Interior width (mm)	1,420			
Interior height (mm)	1,250			

Shoulder room – front (mm)	1,334					
Shoulder room – rear (mm)	1,315					
Rear kneeroom (mm)	120					
Couple distance (mm)	866					
VDA luggage capacity – rear seat up (l)	286					
Boot length – rear seat up (mm)	710					
Max. boot width (mm)	1,365					
Coefficient of drag (Cd)	0.287					
Fuel tank (l)	42					
<b>WEIGHTS</b>	<b>1.0 VVT-i</b>	<b>1.33 Dual VVT-i</b>	<b>1.4 D-4D</b>			
Kerb weight (kg)	950 – 1,005	1,005 – 1,045	1,035 – 1,075			
Gross vehicle weight (kg)	1,430	1,480	1,525			
<b>SUSPENSION</b>						
Front	MacPherson struts with anti-roll bar					
Rear	Torsion beam					
<b>BRAKES</b>						
Front	278mm ventilated discs					
Rear	203mm drums					
<b>WHEELS &amp; TYRES</b>						
Wheel size	15in steel or alloy	16in alloy				
Tyre size	175/65R15	195/50R16				
<b>STEERING</b>						
Type	Rack and pinion, electric motor power assisted					
Ratio	12.8:1					
Turns – lock to lock	3.0					
Minimum turning radius – tyre (m)	4.7					
<b>TRANSMISSION</b>		<b>1.0 VVT-i 5 M/T</b>	<b>1.33 Dual VVT-i 6 M/T</b>	<b>1.33 Dual VVT-i MDS</b>	<b>1.4 D-4D 6 M/T</b>	
Gear ratios	First	3.545	3.538	2.386	3.538	
	Second	1.913	1.913		to	1.913
	Third	1.310	1.392			1.310
	Fourth	1.027	1.029	0.431	0.971	
	Fifth	0.850	0.818		0.714	
	Sixth	-	0.700		0.619	
	Reverse	3.214	3.333	2.505	3.333	
Final drive ratio	4.239	4.294	5.079	3.550		

### Toyota Yaris equipment specifications

<b>SAFETY</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Driver's airbag	✓	✓	✓	✓
Front passenger airbag with cut-off switch	✓	✓	✓	✓
Front side airbags	✓	✓	✓	✓
Curtain shield airbags	✓	✓	✓	✓
Driver's knee airbag	✓	✓	✓	✓
ISOFIX child seat fixings on outer rear seats	✓	✓	✓	✓
Child-proof rear door locks (5-door)	✓	✓	✓	✓
Front seatbelts with pretensioners and force limiters	✓	✓	✓	✓
Five three-point seatbelts with Emergency Locking Retractor (ELR)	✓	✓	✓	✓

Whiplash Injury Lessening (WIL) front seats	✓	✓	✓	✓
ABS with Electronic Brakeforce Distribution (EBD) and Brake Assist (BA)	✓	✓	✓	✓
Vehicle Stability Control (VSC) and Traction Control (TRC)	✓	✓	✓	✓
Collapsible steering column	✓	✓	✓	✓
Retractable brake pedal	✓	✓	✓	✓
Seatbelt reminder light and buzzer (driver and front passenger)	✓	✓	✓	✓
<b>INSTRUMENTS &amp; CONTROLS</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Analogue odometer	✓	✓	✓	✓
Analogue tachometer	x	✓	✓	✓
Trip computer	✓	✓	✓	✓
Outside temperature display	✓	✓	✓	✓
Digital clock	✓	✓	✓	✓
Engine temperature warning	✓	✓	✓	✓
Lights on audible warning	✓	✓	✓	✓
Door ajar warning	✓	✓	✓	✓
Twin speed wipers, variable intermittent with mist function	✓	✓	✓	✓
Headlamp levelling adjustment	✓	✓	✓	✓
<b>COMFORT &amp; CONVENIENCE</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Electrically adjustable door mirrors	✓	✓	✓	✓
Remote fuel flap release	✓	✓	✓	✓
Electric Power Steering (EPS)	✓	✓	✓	✓
Electric front windows with driver's "one touch" down operation	✓	✓	✓	✓
Electric rear windows	x	x	x	✓
Rear-view camera	x	✓	✓	✓
Stepless tilt and telescopic steering wheel adjustment	✓	✓	✓	✓
Front map lights (2)	✓	✓	✓	✓
Boot light	✓	✓	✓	✓
Passenger vanity mirror with cover	✓	✓	✓	✓
Driver vanity mirror with cover	x	✓	✓	✓
Accessory power socket (front)	✓	✓	✓	✓
Rain-sensing front wipers	x	x	x	✓
Follow-me-home headlights	✓	✓	✓	✓
Dusk-sensing headlights	x	x	x	✓
Auto-dimming rear-view mirror	x	x	x	✓
Smart Entry and Start	x	x	x	✓
<b>AUDIO, COMMUNICATIONS &amp; NAVIGATION</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
CD player with WMA/MP3 reader	✓	✓	✓	✓
RDS radio	✓	✓	✓	✓
Toyota Touch touchscreen control	x	✓	✓	✓
Toyota Touch and Go multimedia system with satellite navigation	x	Opt	Opt	Opt
Bluetooth	x	✓	✓	✓
Aux-in/USB connection	x	✓	✓	✓
<b>VENTILATION</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Manual air conditioning	x	✓	✓	x
Dual-zone climate control air conditioning	x	x	x	✓
Ventilated glove box	x	x	x	✓
Air recirculation and clean air filter	✓	✓	✓	✓
<b>SECURITY</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Transponder engine immobiliser	✓	✓	✓	✓
Remote control central double locking	✓	✓	✓	✓
Vehicle parts marking – major parts traceable to VIN	✓	✓	✓	✓
<b>STORAGE</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
1-litre bottle holder	✓	✓	✓	✓
Cupholders (2 front, 1 rear)	✓	✓	✓	✓
Glove box	✓	✓	✓	✓

Centre console storage	✓	✓	✓	✓
Concealed in-dash document holder	✓	✓	✓	✓
Front and rear door pockets	✓	✓	✓	✓
<b>SEATING, UPHOLSTERY &amp; TRIM</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Height-adjustable drivers seat	✓	✓	✓	✓
Height adjustable front passenger seat	x	x	✓ (5dr)	x
60:40 split-fold rear seats	✓	✓	✓	✓
Cloth upholstery	✓	✓	x	✓
Cloth and leather upholstery	x	x	✓	x
Cloth door inserts	✓	✓	✓	✓
Leather gear shift knob	x	✓	✓	✓
Perforated leather steering wheel trim	x	x	✓	✓
<b>EXTERIOR &amp; BODY</b>	<b>T<sub>2</sub></b>	<b>TR</b>	<b>SR</b>	<b>T SPIRIT</b>
Colour-keyed doorhandles and mirrors	x	✓	✓	✓
Colour-keyed front and rear bumpers	✓	✓	✓	✓
Chrome front grille trim	x	✓	x	✓
Smoked chrome front grille and rear trim	x	x	✓	x
Metallic paint	Opt	Opt	Opt	Opt
Rear spoiler	x	x	✓	x
Front fog lamps	x	x	✓	✓
Panoramic roof	x	x	x	✓
Rear privacy glass	x	x	✓	x
15in 5-spoke alloy wheels with locking wheelnuts	x	✓	x	✓
16in 8-spoke alloy wheels with locking wheelnuts	x	x	✓	x
Space saver spare wheel	✓	✓	✓	✓