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The heritage of Land Cruiser

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The heritage of Land Cruiser

- **A legend in the global SUV market**
- **Toyota's first official export**
- **The world's best-selling SUV**

The Land Cruiser name is synonymous with Toyota's worldwide brand values of outstanding quality, durability and reliability. It occupies a special place in the company's history, tracing its roots back to 1951 and having the distinction of being Toyota's first mass-production model to be officially exported from Japan, in 1956.

BJ - 1st generation *20 series - 2nd generation* *40 series - 3rd generation* *55 series - 4th generation*

The launch of a new Toyota Land Cruiser is a significant event, given that no other 4x4 car in history has driven as many roads and off-road tracks – just one of the reasons why Land Cruiser remains a legend around the world.

60 series - 5th generation *80 series - 6th generation* *100 series - 7th generation*

Land Cruiser Chief Engineer Sadayoshi Koyari explains: "For almost 60 years now, three key words have been the basis of each Land Cruiser generation: strength, durability and reliability. With the new Land Cruiser V8 we were determined to recognise the loyalty of Land Cruiser customers by providing a vehicle that will never betray their trust."

All-new Land Cruiser V8

- **Eight generations of Toyota's longest-running Toyota model**
- **More than five million worldwide sales**

The all-new Land Cruiser V8 is the eighth in a line of long-wheelbase, station wagon-style Land Cruisers. With a heritage going back 57 years, it is the longest-running model in the Toyota line-up and has been in the forefront of Toyota's expansion since the 1950s, taking the brand to new continents and previously untapped markets.

Land Cruiser V8's roots can be traced right back to the BJ, the first four-wheel drive vehicle developed by Toyota, produced early in 1951. Powered by a 3.4-litre, six-cylinder engine, the BJ rapidly gained a reputation for toughness and an ability to go anywhere.

Within six months of its launch the BJ was hailed as a champion, becoming the first vehicle to be driven to the sixth hill station of Japan's Mount Fuji, 2,500 metres up. As a result of this feat, the BJ was added to the Japanese police fleet and the model's long-term success began. In 1954 the new Type 25 BJ was given a generic model name – Land Cruiser – which has been used ever since.

As Toyota began its worldwide export and growth programme during the 1950s and 1960s, it found that American and European carmakers had already secured high penetration in the established markets, leaving little room for new entrants from Japan. Strategically, Toyota decided to focus on the emerging markets of the Middle East, south-east Asia and South America.

In 1967, Toyota responded to the popular trend in the American market for more refined 4x4 vehicles with the launch of the Land Cruiser Station Wagon FJ55V. This was to create a new generation of Land Cruisers, running in parallel with the original 'jeep-style' off-road concept.

Over the years, Land Cruiser has become synonymous with Toyota throughout the world. From Australian Outback to the Russian steppes and the streets of Europe, the vehicle is admired for its all-round capabilities: highly reliable, tough off-road, yet sufficiently comfortable and refined to go anywhere and be seen everywhere.

It continues to be a global sales success and is the world's best-selling SUV, with more than five million customers since launch. Today it is sold in more than 140 countries and produced in nine Toyota manufacturing plants around the globe (all body types). Its principle markets are the Middle East, Australia and Europe.

A new generation

- **Advancing Land Cruiser's fundamental strengths**
- **Meeting the expectations of modern customers**

Typical Land Cruiser customers look for modern technology in their cars, but they also value the brand heritage behind the badge and the authentic 'Land Cruiser style'.

Toyota has the same fundamental aims with every new Land Cruiser: firstly to build on the vehicle's tradition of reliability, durability and off-road performance; and secondly to improve handling stability, ride comfort and driving pleasure.

Chief Engineer Sadayoshi Koyari says: "At the start of this project, back in 2002, we considered the future direction of Land Cruiser, taking into account the evolving expectations of a global customer base with a strong demand for the model. I am confident that the all-new Land Cruiser V8 has the genuine off-road capability to strengthen Toyota's reputation for advanced technology, while offering increased refinement and a premium market position. It is a real, go-anywhere adventure vehicle."

The global sales target for the model is 86,500 units in 2008, with around 18,000 vehicles available in Europe. Its outstanding 4x4 capability is especially valued in Russia, making it a major market with a target of 9,500 units.

Across Europe, typical Land Cruiser customers are self-confident and successful people from higher income brackets. They are often early adopters of advanced technology and appreciate Land Cruiser for its blend of technical ability, durability, refinement and a genuinely adventurous off-road spirit.

The all-new Land Cruiser V8 delivers improvements in all of these aspects, together with improved safety and comfort, ensuring that Toyota's flagship model continues to satisfy customers' needs and expectations right around the world.

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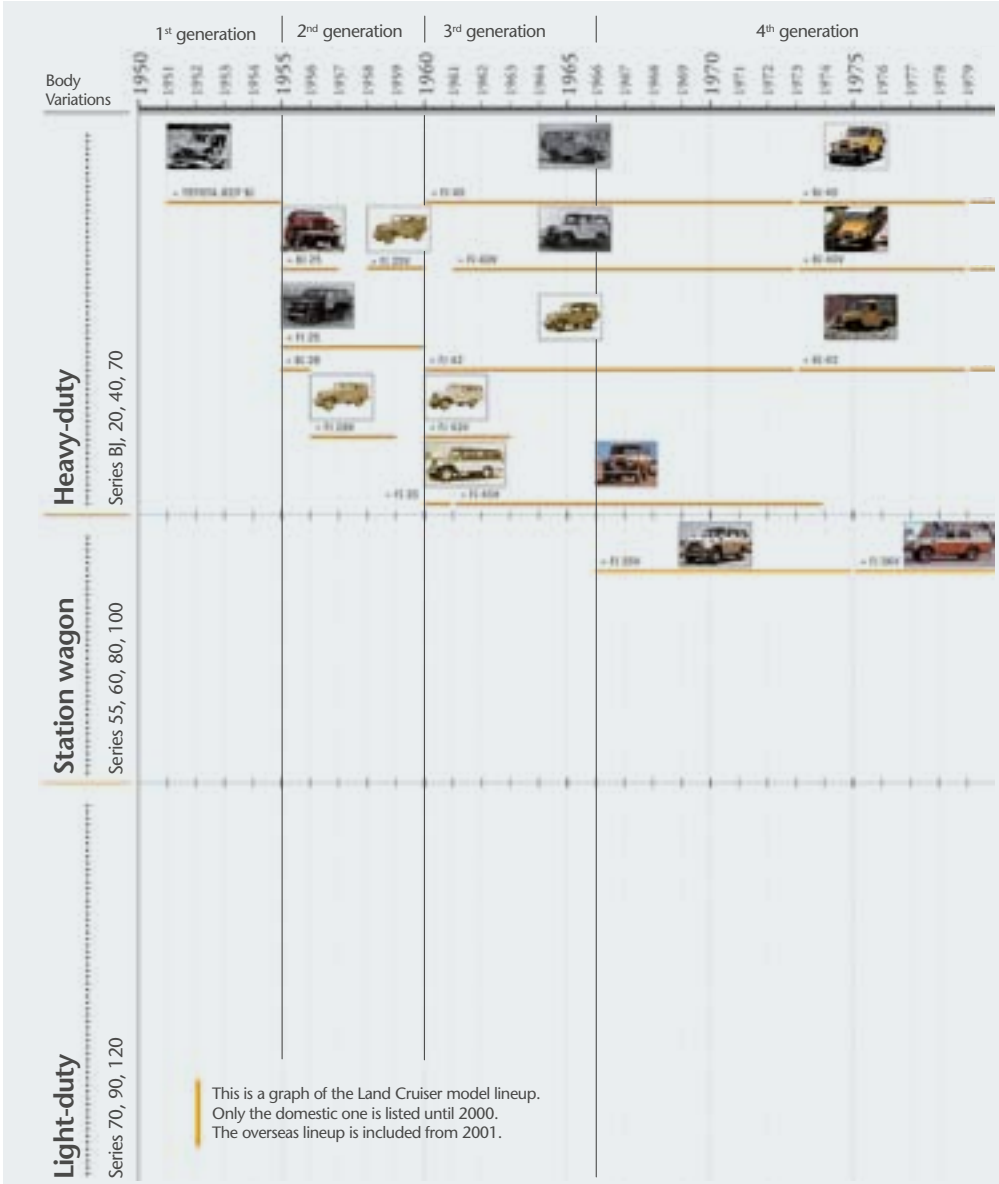
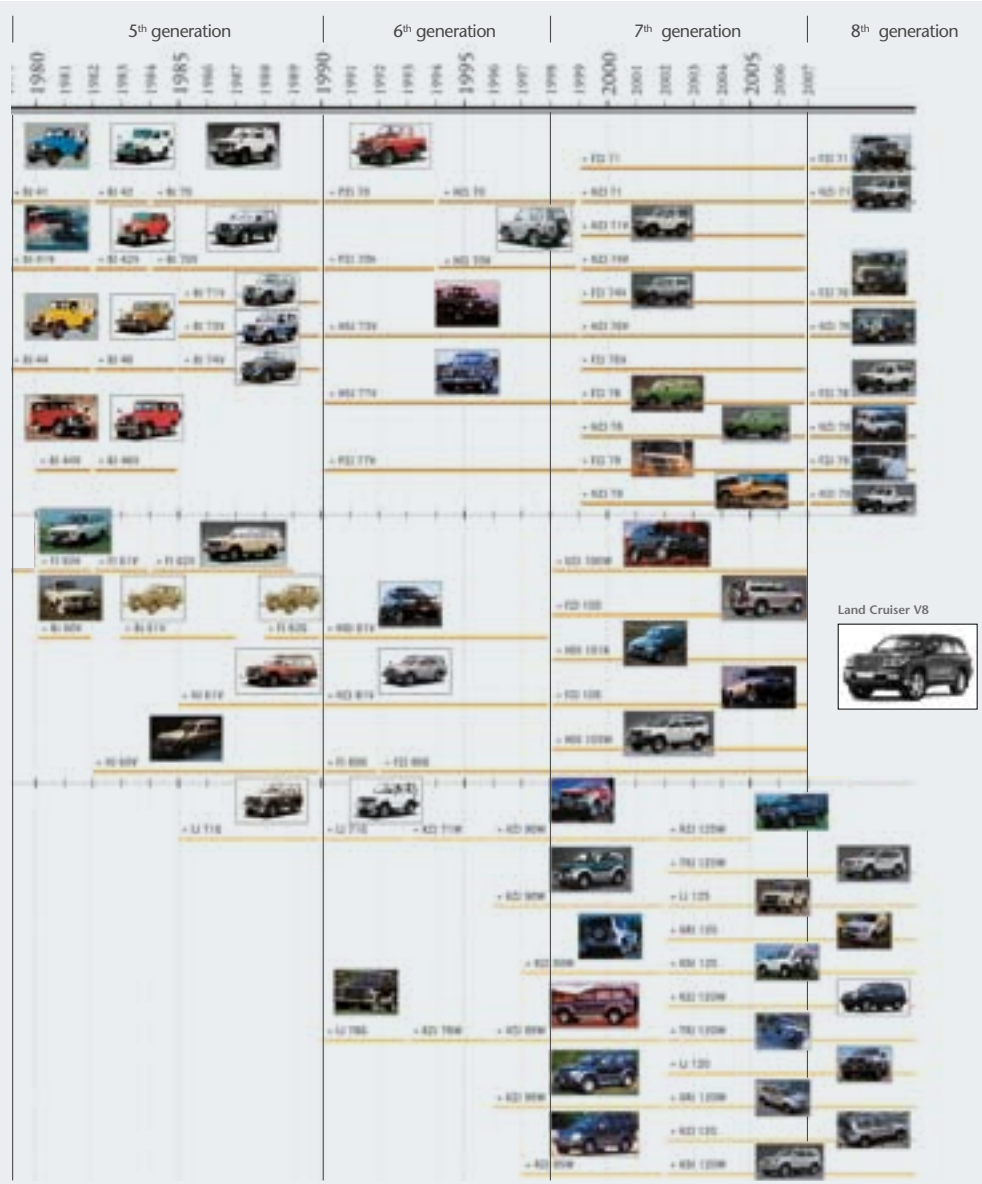

1st generation
2nd generation
3rd generation
4th generation
Body Variations
1950
1955
1960
1965
1970
1975
Heavy-duty
Series BJ, 20, 40, 70
Station wagon
Series 55, 60, 80, 100
Light-duty
Series 70, 90, 120
This is a graph of the Land Cruiser model lineup.
Only the domestic one is listed until 2000.
The overseas lineup is included from 2001.


5th generation
6th generation
7th generation
8th generation
1980
1985
1990
1995
2000
2005
Land Cruiser V8

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Powerful, functional design

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Powerful, functional design

- **Advanced and rugged exterior**
- **Form and function the focus for refined interior**
- **Versatile seven-seat configuration**

For more than 50 years, consistently high quality and technical sophistication have earned Land Cruiser its special status in Toyota's model line-up, embodying the company's world-beating four-wheel drive capability. The design of the new Land Cruiser V8 needed to respect this heritage, while bringing Toyota's off-road image up-to-date.

The new model has a rugged and powerful exterior design, with a strong emphasis on function and retaining many characteristics of previous generations. The interior, with its bold shapes, expresses the vehicle's refined, premium quality.

It's a practical vehicle, too, seating seven with ample space for all passengers, and offering flexible load-carrying capacity with seats that tumble and fold to create a flat floor.

Created and styled at the Toyota design centre in Aichi, Japan, the new Land Cruiser V8 exemplifies the 'Vibrant Clarity' aspect of Toyota's brand design philosophy. This ethos guides the development of off-road models that are vibrant and energetic, while retaining clarity of purpose.

Land Cruiser V8 Chief Engineer, Sadayoshi Koyari, explains: "The key word we selected to focus the design evolution of the new Land Cruiser V8 was 'trust'. The reputation and trust built by previous generations of Land Cruiser is therefore heeded in the new design. Further strengthening of this trust between customers and the new generation Land Cruiser V8 is encouraged by blending a strong, dynamic design with an advanced sense of function. This creates a modern, aspirational vehicle with a strong focus on four-wheel drive and genuine off-road driving ability. It brings the Land Cruiser brand identity up-to-date, and further leverages the heritage of the vehicle."

Powerful exterior styling

- **Bold lines and eye-catching surfaces**
- **Dynamic road presence**
- **Integrated front and rear styling**

The new Land Cruiser V8 has a powerful, clean exterior design, with a strong shoulder line, eye-catching surface treatments and large front and rear bumpers. It has a thoroughly modern feel as a functional, yet premium 4x4 vehicle. The size and shape of the side windows emphasise the spaciousness of the cabin and deliver excellent visibility, and the bumpers project an image of strong off-road capability.

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It is slightly longer, taller and wider than the current Land Cruiser Amazon, giving a more dynamic stance, but the increases in size have been kept to a minimum to maintain manoeuvrability in tight, off-road situations.

The overall length is 4,950mm (+60mm), width is 1,970mm (+30mm) and height 1,865mm. Clever design to maximise interior space and a shortened engine compartment have enabled the cabin length to be increased by 130mm (measured from the accelerator pedal to the back door), adding to passenger comfort and convenience.

The integrated chromed radiator grille and headlamps create a strong horizontal line at the front of the vehicle, with a bright alloy finish around the grille's outer frame expressing refinement and premium quality.

At the rear, a powerful stance and flared wheel arches that emphasise the overall width of the vehicle are inherited from the existing Land Cruiser Amazon, as is the configuration of the combination rear lights.

The large rear light units use LEDs (Light-Emitting Diodes) arranged in a two-lamp design to improve visibility. The integrated tail and stop lamps, together with the rear direction indicators, have clear outer lenses and red inner lenses, adding to the premium appearance.

The integrated rear roof spoiler is body coloured to blend in neatly with the line of the body, and is effective in enhancing aerodynamic performance and fuel efficiency. The split rear tailgate has a 'clamshell' design, which allows for easier opening in confined spaces and loading of heavy objects.

The new Land Cruiser V8 is available in a choice of six exterior colours: Tyrol Silver, Decuma Grey, Regency Red, Fir Green and Slate Blue metallic and Astral Black.

Refined and stylish interior

- **Sense of scale and space**
- **Strong, bold shapes**
- **Wood trim detailing**

Function and form are the guiding principles for the interior, which has been designed to reflect the refinement and premium status of Land Cruiser V8 while still allowing a sense of ruggedness and reliability. The interior is practical too, with a choice of five- or seven-seat configuration, ample space for all passengers and versatile seat folding for maximum luggage capacity.

The design of the instrument panel, large central instrument cluster and console is key to the sense of scale and space, with a strong horizontal emphasis helping ensure that the driver is intuitively aware of the angle of the vehicle.

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Detailed wood grain highlights, matched with slim chrome-plated bars with a low gloss finish, add style to the interior. The lower instrument panel features “hold bar” panels with a texture similar to sculpted metal; in keeping with the architectural feel, these appear to support the upper instrument panel. Practical, shaped knee pads are provided to improve comfort and support when driving on rough roads.

The interior has a two-tone design, with a new range of colours. Darker colours are used on the instrument panel and trim areas, with contrasting mid-tones for the upholstery. Two colour schemes are available: Sandstone beige and Ammonite medium grey.

The coherent design extends to the door trims, finished in material that matches the seats at shoulder height and the armrests. Wood grain and chrome-plated bars add style, while the functional parts, such as the inner door handle, door grip and switch panel, are designed in a single element.

New 3D Optitron meters are used on the main instrument panel, with a larger diameter for the main gauge for easier reading. The sub-gauges, crucial for SUV driving, are positioned in the centre of the panel, together with the multi-information display.

The steering wheel has a wide centre pad with large switches that are easy to use, even when wearing gloves. Operational parts such as the automatic transmission shift knob, door handles, and audio switches are also large and have an enhanced tactile quality.

Versatile and functional interior

- **Seven-seat configuration**
- **Rear seats tumble and fold**
- **Second row seats adjustable for extra leg room**

The functionality of the new Land Cruiser is amply demonstrated by its versatile seven-seat arrangement, offering plenty of passenger and luggage space.

The seats were designed with the focus on function demanded in a genuine off-roader: firm lower back support and free shoulder movement. Firm, thick cushioning ensures a stable seat position, with further support from the vehicle’s high damping effects.

The second row of seats is divided 40:20:40 with an independent seat back with integral headrest for the centre seat. All three seats can be reclined and slid backwards and forwards by 105mm to allow ample leg room for third row passengers.

Each seat can also be tumbled forward to increase load capacity, while the seat behind the front passenger – most frequently used for third row access – has a one-touch tumble function for easy entry and exit. Simply pulling the seat lever; folds the seat back forward and releases the floor lock.

The third row has two individual adult-sized seats with ‘space-up’ folding: a damper mechanism automatically pops the seat up from the seating position to the stored position when unlocked. When not in use, the seats fold neatly away against the wall of the luggage compartment and are locked in place.

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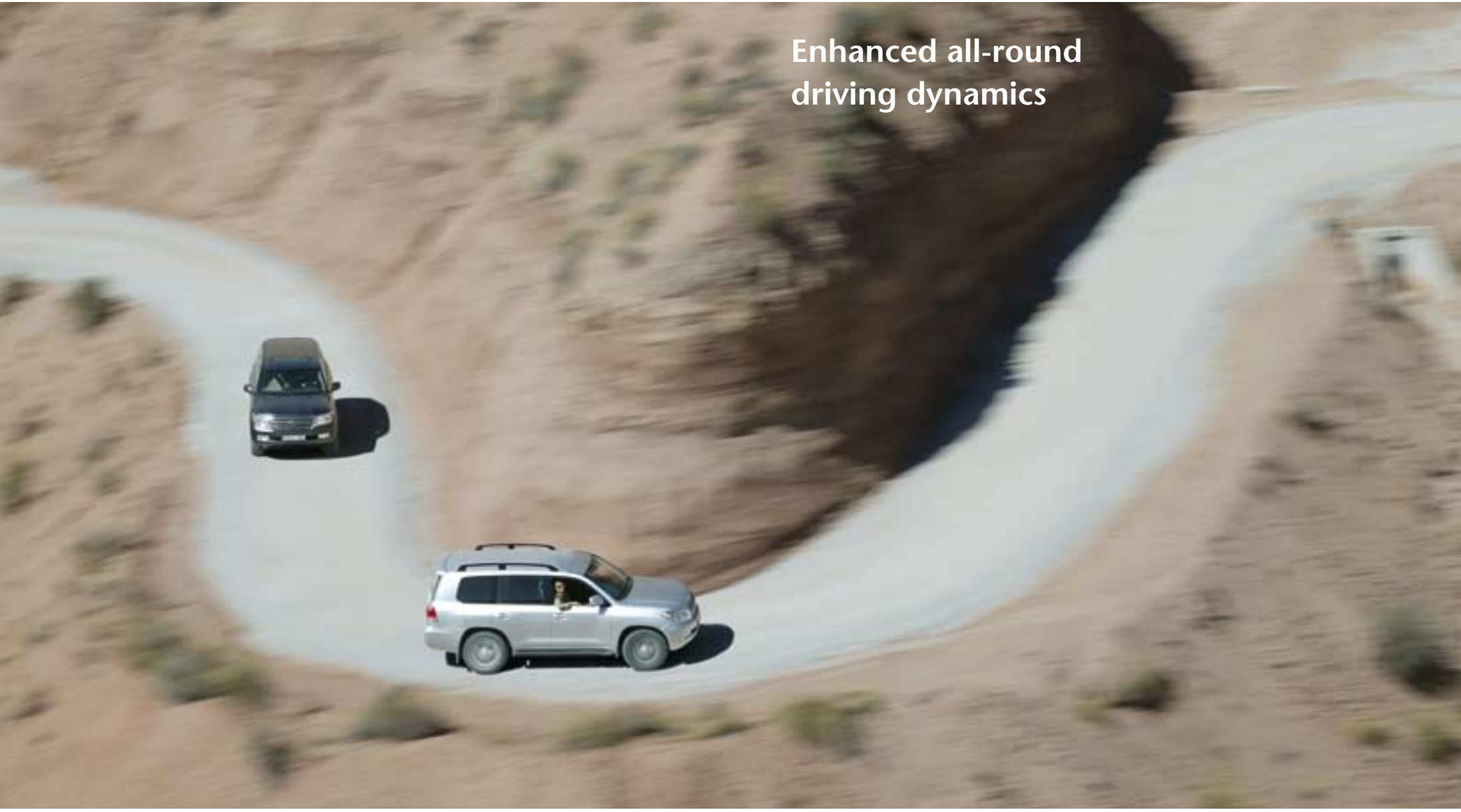

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Enhanced all-round driving dynamics

- **World first: 4-wheel AHC & AVS (Active Height Control and Adaptive Variable Suspension)**
- **New Torsen® limited slip centre differential**

With an off-roading heritage of almost 60 years, drivers expect Land Cruiser to perform perfectly on the toughest tracks and trails, right around the world. Its legendary reputation for quality, durability and reliability means they accept no compromise.

The new Land Cruiser V8 is one of the most technically advanced four-wheel-drive vehicles ever produced, equipped with features that make on and off-road driving safer, more comfortable and more pleasurable and that can provide crucial assistance in difficult terrain where even the most skilful drivers might otherwise struggle.

The all-new platform has a sophisticated suspension design, with several newly-developed supporting systems, delivering superior handling and stability, both on and off-road.

At the front, coil springs replace the former torsion bar to give better ride comfort and control. The suspension has a double wishbone layout with inclined coil springs and dampers for optimum stability.

The front wheel stroke has been increased by 11 per cent for bound and 18 per cent for rebound, now reaching 230mm, to improve performance over rough ground. The entire suspension unit is strong enough to withstand the most rigorous conditions, yet ride comfort and steering feel have actually been enhanced, through careful tuning and precise geometry.

The well-established, four-link coil rear suspension from the current generation Land Cruiser Amazon is carried over to the new model, but has been retuned to provide significantly better handling, ride comfort and off-road performance. Roll steer has been optimised by moving the control arm position to ensure superior handling and stability, while the characteristics and size of the bushes have been evaluated to deliver ride comfort.

Long travel suspension of 230/240 mm front/rear and short overhangs ensure that the new Land Cruiser V8 can tackle the roughest road surfaces. The maximum approach angle is 31° and the maximum departure angle is 23°. The ramp break over angle is 24°.

4-wheel AHC & AVS

- **All four wheels linked**
- **Spring rate control**
- **Quicker height adjustment**

The suspension of all four wheels on Land Cruiser V8 is linked through a new, fully adjustable suspension system, 4-wheel Active Height Control and Adaptive Variable Suspension (4-wheel AHC & AVS). It also provides spring rate control, making it a world-first for Land Cruiser and the most sophisticated suspension system available on any production SUV.

It not only allows Land Cruiser V8 to achieve optimum off-road performance but also provides exceptional on-road refinement, comfort, pitch and body roll control.

The spring rate control operates on the front suspension, using a single control valve to influence the suspension characteristics when turning or braking. This means that the front suspension can be stiffened to reduce roll or pitch angle during high-speed manoeuvres, but softened in normal driving.

A new mechanical system functions as a link between the four wheels: on-road, the balanced pressure across all four wheels ensures stability and comfort; off-road, the movement of wheels out of phase with each other allows the hydraulic pressure to vary and releases individual wheels for easier stroking through excellent wheel articulation. This increases the vehicle's ability to soak up the bumps and offers greater ground contact, thus strengthening rough off-road performance.

The result is that the Land Cruiser V8, with its 2,850mm wheelbase, can crawl over steps with a height difference of 630mm without lifting a wheel off the ground.

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4W AHC & AVS links all four wheel's suspension system

In addition, the vehicle's Active Height Control (AHC) functions have been improved to extend the range of height adjustment and shorten the time it takes to lower the vehicle. The front of the Land Cruiser V8 now has 110mm of height adjustment while the rear can be moved through 100mm. Shifting from normal to low mode takes about two seconds. The ride height is automatically raised when L4 gear mode is selected, and increased by a further 20mm when the 4-wheel AHC & AVS system recognises that the vehicle is stuck. It automatically lowers the vehicle to improve stability when driving at high speeds.

The Adaptive Variable Suspension (AVS) sub-system gives greater ride comfort on-road and the adoption of new control parameters improves performance over rough roads.

Smooth, easy operation drive train

- **Full time all-wheel drive system**
- **All-new transfer unit**
- **Torsen® limited slip centre differential**
- **New rotary switch operation for reduction ratios**

With its greatly increased power and torque, the Land Cruiser V8's full time all-wheel drive system required a new transfer unit to govern the distribution of torque front to rear and provide high and low gearing ratios. The new unit is stronger and lighter and the centre of gravity has been moved forwards to improve handling. The control logic and switching performance have also been improved.

Torsen® LSD

Torsen® LSD switch

At the heart of the transfer unit is a newly developed Torsen® 'torque-sensing' limited slip centre differential which gives smoother cornering performance and improved driving stability.
By automatically sensing the drive torque required at each axle, the differential can adjust torque between front and rear wheels for greater driving stability.

In straight-ahead, dry-road driving, torque distribution is 40/60 front to rear. However, torque can be biased to the front wheels to a maximum of 50 per cent, or to the rear wheels up to 70 per

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cent. These limits have been carefully set by calculating the Torsen® differential wheels' dimension, to maintain vehicle stability and improve traction and safety.

The transfer shift system has been completely redesigned for greater operating efficiency and convenience. A simple rotary switch is used to move the shift from H4 to L4 gearing, something that can be done at vehicle speeds up to 3mph. Next to it on the control panel is a button that can lock (or free) the centre differential in the optimal ratio to help the Land Cruiser V8 in exceptionally slippery circumstances.

Steering precision

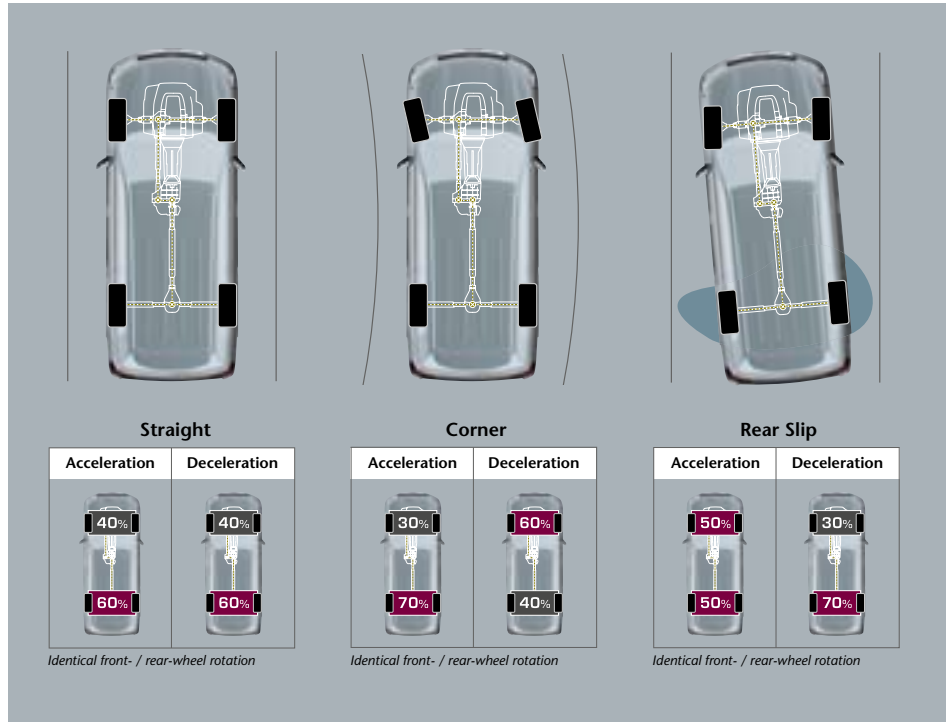
- **Variable Gear Ratio System (VGRS)**
- **Multi-adjustable steering column**

Driving pleasure on and off-road is further enhanced by the Variable Gear Ratio Steering (VGRS). The steering is a rack and pinion system for maximum straight-line stability at high speeds and vehicle performance at low speeds.

The gear ratio is set larger around the steering centre and smaller around the end position. As a result, rack stroke around the end position is larger, reducing the effort required from the driver in low speed manoeuvres, while ensuring optimal response for high speed motorway driving.

The steering column itself is adjustable for both reach and rake. Its energy-absorbing mechanism reduces impact energy and the entire column is designed to break away from its mounting bracket and move away from the driver in the event of an accident.

Torsen® LSD function



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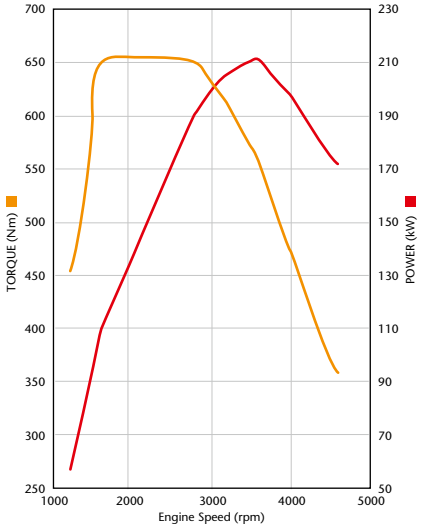
State-of-the-art petrol and diesel V8 engines

- **Brand-new V8 diesel**
- **New six-speed auto gearbox with manual sequential function**

The all-new Land Cruiser V8, flagship of the Toyota four-wheel-drive range is equipped with the most powerful and technically advanced diesel engine the company has yet developed. The new twin-turbocharged 4.5-litre V8 D-4D is designed to provide excellent performance under all road conditions with high power output, broad controllable torque band and the lowest emissions and fuel consumption in its class.

Development focused on four fundamental principles: high power, low fuel consumption, low noise and exceptional reliability.

Performance chart



The 4,461cc engine has significant performance and fuel efficiency benefits over the 4.2-litre straight-six turbodiesel it replaces. Maximum power output is 282bhp (286 DIN hp) at 3,600rpm and maximum torque is 650Nm available all the way from 1,600 to 2,800rpm. These figures represent a 40 per cent increase in power and a 50 per cent increase in torque compared to the previous engine.

This gives a top speed of 130mph and acceleration from nought to 62mph in 8.2 seconds. Fuel economy is four per cent better than the previous 4.2 diesel, at 27.7mpg on the combined cycle. Each bank of cylinders on the V8 is served by separate common rail and solenoid injectors. Well-proven on Toyota's four-cylinder engines, these are adopted to ensure maximum reliability with high engine output and low emissions.

The maximum injection pressure is raised to 1,800 bar (compared with 1,350 bar on the 4.2 TD engine) yielding finer, more precise fuel injection for more efficient combustion, power and efficiency.

D-4D V8

The second generation common rail technology also allows for a quieter combustion process, enabling two individual pilot injection strokes of around 1mm³ ahead of the normal injection stroke, all of which happens within a few milliseconds. As a result, combustion noise is 3.5 dB(A) lower than from the previous engine.

Two low inertia turbochargers are fitted to provide rapid response to throttle commands and high power output. They feature variable nozzle technology with the nozzle size controlled by a 12-volt DC electric motor, rather than a vacuum diaphragm. This means the nozzle can be adjusted more quickly and on a continuous basis, leading to greater efficiency and precision.

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The new diesel engine block is cast in compacted graphite cast iron (CGI) which is both stronger, (75% stronger compared to the engine block material of the outgoing diesel engine), and lighter, weighing 30 per cent less. This helps improve fuel consumption, weight balance and handling. CGI is difficult to process but is light, withstands wear and corrosion, and is very resistant to heat and shock. By using it for the cast iron cylinder block, Toyota has reduced noise and saved significant weight when compared with equivalent engines.

Engine durability is further enhanced by an oil scavenging system fitted to the turbochargers to collect surplus oil and reduce blue smoke emission in all driving conditions, for example when driving on an incline, turning or braking. Two electronically-controlled hydraulic mounts are used to absorb vibration and improve comfort at low speed or idle. The mounts are 1.5 times stronger than those used on conventional cars.

Laboratory tests simulated severe environment conditions to ensure the engine performs faultlessly in temperatures from -30 to +50°C.

To reduce exhaust emissions a V8-style Exhaust Gas Recirculation (EGR) system is adopted with water cooling and a highly efficient, multi-layered EGR cooler. The EGR gas passages have been incorporated into the cylinder head to reduce the complexity of parts and weight. Furthermore, two rotary solenoid diesel throttles and linear solenoid EGR valves are used to cut the level of visible smoke and avoid unstable combustion.

Advanced transmissions

- **New six-speed automatic**
- **Artificial Intelligence shift**
- **Sequential manual gear selection**

A new, six-speed automatic transmission has been developed for the 4.5 V8 D-4D engine, to give smooth, fuel-efficient operation. The design focus was on off-road driving performance, with an optimal gearing ratio size. It is also able to accommodate high torque and is impressively quiet during high speed driving.

The gearbox is controlled with a sequential shift pattern that allows fully automatic gear changes (D position), or manual selection of a gear range by the driver from the sequential position (S position).

In fully automatic mode the gearbox uses Artificial Intelligence (AI) shift control, to switch to a shift pattern that gives the most effective driving performance in line with road conditions and driving style. This can take account, for example, of up or downhill driving and more sporty input from the driver.

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No compromise on quality, durability, reliability

- **Body-on-frame construction structure maintained**
- **Excellent isolation from road noise**
- **Improved active and passive safety systems**

As well as offering extra refinement, more comfort and a superior driving experience, the new Toyota Land Cruiser V8 retains the well-established features that have contributed to Land Cruiser's worldwide rugged appeal and thoroughbred off-roader status.

These include the traditional body-on-frame construction with a separate chassis and body structure; advanced technology driving aids such as Downhill Assist Control (DAC) and Hill-start Assist Control (HAC); and a wealth of active and passive safety features, including a brand new multi-terrain ABS system.

Together with Toyota's legendary engineering skill and the all-new, advanced design, these features ensure that the new Land Cruiser V8 continues to lead the world in quality, durability and reliability – attributes that are essential to Land Cruiser owners.

Toyota has not compromised on the fundamental body-on-frame design. While other manufacturers have adopted monocoque concepts, Toyota has created an all-new separate chassis and an advanced suspension design to gain greater rewards in terms of driving pleasure, refinement and quality.

This approach has advantages for off-road vehicles where a go-anywhere capability is crucial. Much of the strength of the vehicle to resist the impacts of off-road driving can be built into the chassis, avoiding the need to increase the size or weight of the body and passenger compartment. At the same time, the chassis can be engineered to better absorb energy impact in the event of a serious collision.

Building strength into the chassis increases the resistance to torsion and twisting, giving the designers a stable and strong base on which to mount the body. This improves driving performance and handling, both on and off-road, with extra freedom in suspension design and travel, plus more stable mounting points for steering joints.

Separating the body and chassis means the passenger compartment itself can be better insulated from the shocks and noise of off-road driving – meaning much lower noise, vibration and harshness (NVH) under all driving conditions.

Finally, a strong chassis gives the Land Cruiser V8 a towing capacity of 3,500kg.

Strong chassis design

- **Increased chassis rail strength**
- **New hydro-form technology**

An all-new high strength, high rigidity frame has been designed to accommodate the Land Cruiser V8's body. The chassis rail's cross-sectional height and width have been increased to achieve a highly rigid structure, and high tensile steel is used to reduce weight without compromising strength.

Frame

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Torsional and flexural rigidity

New hydro-form technology has been employed to manufacture specific cross members. This has also increased the joint strength with the side rail, contributing to a frame structure with higher rigidity. The new frame's torsional rigidity is 1.4 times stronger than the outgoing Land Cruiser Amazon and flexural rigidity is 1.2 times greater.

An extra lightweight front suspension cross member has been added, and the coil support area of the front suspension strengthened for optimum performance.

High-tensile steel is used extensively throughout the body and has been treated for rust resistance across a broad range of the body panels to ensure durability, even in world's harshest driving environments.

Noise and vibration transmission has been reduced through a strong, reinforced body structure, installation of sound insulation material and vibration damping throughout the body. Combined with precision-build quality – such as reduced panel gaps and surface level changes – and advanced aerodynamics, the new Land Cruiser V8 lives up to its promise as a premium-quality vehicle.

Active Driving Control

- **Multi-terrain ABS**
- **Hill-start Assist Control (HAC)**
- **Downhill Assist Control (DAC)**

The new Land Cruiser V8 benefits from a range of advanced active-driving control features to ensure peak performance in all conditions.

The new multi-terrain ABS incorporates a world-first control logic that recognises any road surface and automatically switches to the appropriate braking control.

ABS/EBD/BA

Using information such as engine output, acceleration rate and wheel speed, the on-board computer can sense off-road driving, such as snow, dirt and sand. It then controls the ABS with the optimal slip rate, for more effective braking.

Electronic Brake-force Distribution (EBD) and Brake Assist (BA) detect emergency braking and automatically generate a larger braking force. Large diameter disc brakes (front 340mm, rear 345mm) are fitted as standard, further improving braking performance.

VSC&A-TRC

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Vehicle Stability Control (VSC), which intervenes when sensors detect the Land Cruiser V8 is reaching the critical limits of cornering, has been upgraded with a cut-off switch. This enables the driver to deactivate VSC and traction control, preventing it from automatically reducing engine output when using high wheel-spin to escape from mud, fresh snow or other difficult terrain.

Another new development is that the Active Traction Control (A-TRC) now maximises traction and vehicle speed without the operation of a differential lock when the vehicle is in low-ratio, four-wheel drive mode (L4). When L4 is selected, the engine output control is lifted, but the braking system receives stronger hydraulic pressure control.

A-TRC works in combination with a number of other advanced traction control devices such as Downhill Assist Control (DAC) and Hill-start Assist Control (HAC).

Hill-start Assist Control (HAC)

- **Fitted as standard**
- **Boosts driver confidence**

Hill-start Assist Control (HAC) allows an easier start when setting off from a steep or low-grip hill position by automatically controlling the brake as the driver moves from brake to accelerator, reducing backward motion.

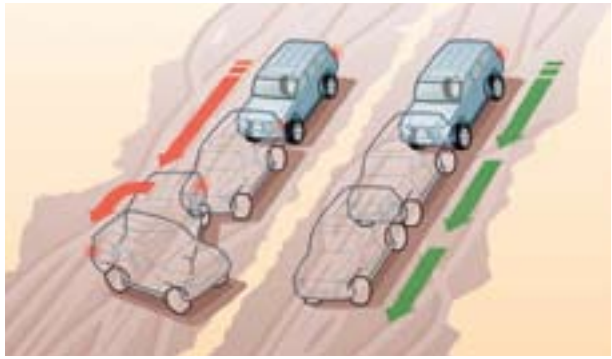
HAC

By controlling the rotation of each individual wheel, HAC is able to arrest the motion, allowing the driver to pull away without losing control. This not only boosts hill-start performance but also increases driver confidence.

Downhill Assist Control

Downhill Assist Control (DAC), a technology specifically for diesel-powered vehicles, is a brake control system which works automatically on the wheels to govern speed and prevents loss of control when driving down a steep incline.

DAC



In these situations, keeping the vehicle under control can be difficult due to wheel lock; even engine braking may not be sufficient to reduce vehicle speed. DAC offers far greater control under these conditions than the foot brake.

DAC is driver operated and can be switched on when L4 reduction ratio is selected on the transfer box. It operates at speeds of less than 15mph with feet off the accelerator and brake pedal. Speeds are controlled to between 2.5 and 5.5mph if moving forwards and between 1 and 4mph if moving backwards.

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Passive safety systems

- **Pre-crash system senses accidents**
- **14 airbags as standard**

The new Toyota Land Cruiser V8 is designed to avoid accidents wherever possible, and to offer maximum protection to occupants if a collision does occur. The on-board passive safety features are intelligent and integrated to work with each other to absorb impact energy and reduce the risk of injury.

Airbags

A newly-developed pre-crash safety system optimises the restraints for front seat passengers by using a motor to tension the front passenger seatbelts in the event of a dangerous situation. For example, this could occur when the on-board sensors determine that the vehicle is spinning, or under sudden braking.

After the impact, two-step force limiters control the tension in the belts, gradually reducing it to minimise the potential force on the chest and abdomen. Front seat occupants are held firmly in place and the potential for injury is reduced.

Further impact protection comes from the 14 airbags which are available. For the first time, both driver and front seat passenger have knee airbag protection and both front airbags have a two-stage inflation capability to match the severity of the collision impact.

Side airbags are standard on the front and second row seats. Curtain shield airbags protect outer seat passengers in all three rows.

Both front seats feature Whiplash Injury Lessening (WIL) technology which reduces impact on the occupant's neck in the event of a rear collision. An active headrest structure senses movement in the lower back rest and pushes the headrest upwards by 30mm and forwards by 25mm to reduce neck movement and the risk of associated injury.

Outer second row seats have Isofix child seat fittings as standard, with top tether mounts positioned to prevent them from interfering with passengers in the third row of seats.

The chassis structure has been designed to absorb impact energy in the event of a collision and attention has also been focused on reducing injury risks to pedestrians.

The bonnet structure is rigid but capable of absorbing impact energy, while the leading edge has an impact absorbing bead for effective performance in frontal collisions with smaller pedestrians, such as children. There are also impact-absorbing brackets between the side panels and the wing, and there is an open area between the rear of the bonnet and the windscreen, allowing the bonnet to move back in the event of a collision.

TOYOTA

Premium comfort and equipment

TOYOTA

Premium comfort and equipment

- **All-new air conditioning system**
- **Nine-speaker Pioneer audio system with six-DVD autochanger**
- **Full-map satellite navigation**
- **Bluetooth connectivity**

Typically, Land Cruiser owners are successful people with a taste for the good things in life, hence they choose a car that is modern, stylish and, above all, well equipped and comfortable for their needs – all qualities that are found in the new Land Cruiser V8.

A powerful road presence, refined interior and high level of quality equipment mark out the Land Cruiser V8 as a premium SUV with the perfect blend of go-anywhere capability, comfort and sophistication.

It is more spacious than the current Land Cruiser Amazon, with generous leg and head room for all passengers. The versatile seven-seat interior, with seats that slide, tumble and tip, enables flexible use of interior space.

Precision fit and finish and a strong sense of functionality and quality characterise the interior, with wood trim details adding extra style. Advanced technology is reflected in the large Optitron instruments for speed, engine revs, gearshift position, odometer and trip meter, plus vehicle information such as cruising range and fuel efficiency.

Land Cruiser V8 in the UK
For the UK market, the new Land Cruiser V8 is available in a single, high-specification luxury grade. On sale from 15 February 2008, it is priced from £55,995 on the road. The expected sales for 2008 are 500 units.

Model	Otr price
Land Cruiser V8 4.5 D-4D auto	£55,995
Land Cruiser V8 4.5 D-4D auto with Premium ICE Pack	£57,845
Land Cruiser V8 4.5 D-4D auto with Premium Audio Pack	£57,120
Land Cruiser V8 4.5 D-4D auto with Premium ICE and Audio Packs	£58,970

All-new air conditioning

- **Four-zone, independent temperature control**
- **Fresh air to all seats via a total of 28 ventilation ducts**
- **Voice control of ventilation functions**

The Land Cruiser V8 has a significantly improved air conditioning system, designed to maintain peak performance even when the vehicle is being driven in some of the world's most inhospitable regions.

The digital, fully automatic system provides four-zone, independent temperature control to ensure comfort for all passengers. The independent dual-zone rear-cabin air conditioning can be controlled both from a control panel fitted to the back face of the centre console and from the main air conditioning control unit on the dashboard. Ventilation functions can also be operated by voice commands.

In the front there are 14 vents and ducts providing air flow with manual or automatic temperature control. A further 14 ducts in the ceiling and door pillars and at floor level ensure rear passengers are equally comfortable, in both the second and third row of seats. Independent right and left temperature control is provided, even for the rearmost seats.

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A Positive Temperature Coefficient (PTC) heater and viscous heater, boost the heating effect on cold start. A pollen filter and pollen removal mode reduce the level of pollutants entering the passenger cabin.

High quality in-car entertainment

- **Nine-speaker audio system with DVD autochanger**
- **Optional Premium In-Car Entertainment and JBL audio packs**

The Land Cruiser V8 is equipped as standard with a hifi-quality Pioneer nine-speaker audio system with a six-DVD changer and digital tuner.

The system supports the playback of MP3 and WMA files from CD and offers high quality sound to passengers in all seats from speakers in the four doors and the centre of the instrument panel, plus side squawker and tweeter speakers to the front right and left of the cabin. DVDs can be viewed on the central dashboard screen when the vehicle is stationary.

The optional ICE Pack provides two slim units that enable independent DVD playback on high-definition screens. Designed for easy mounting on the back of the front seats, they also feature input slots for USB sticks and SD cards. Passengers can watch the same programme, synchronised on both screens, or view different movies or play games independently. Infra-red headphones and remote controls are also provided.

The Premium Audio Pack comprises a JBL sound system and an iPod integration kit. The audio arrangement features a 440-watt DSP amplifier and 12 speakers, specifically tuned for the Land Cruiser V8 and positioned for sound reproduction to rival a top quality home audio system. The iPod integration kit enables easy connection to the Land Cruiser's sound system, with track selection and volume adjustment using controls on the steering wheel.

Luxury Specification

- **Full-map satellite navigation**
- **Bluetooth connectivity**
- **Rear parking monitor**

The full-map navigation system uses an eight-inch 32,000-colour display and can give guidance across 24 countries in Europe in a choice of 10 languages. It also provides Bluetooth connectivity to enable hands-free mobile phone use, and a parking camera that sends a clear picture from the vehicle's rear to the monitor screen. To help safe and simple reverse manoeuvres, the image on the screen can be overlaid with guidelines showing the vehicle's projected path.

An auto-dimming rear view mirror, automatic headlamps, rain-sensing windscreen wipers, electric sunroof and 20-inch alloy wheels are also included in the specification.

Standard features include a leather steering wheel with audio and telephone controls, and Toyota's Smart Entry and Push-Button Start system.

Using buttons on the steering wheel, the driver can adjust the audio volume and radio station, answer the telephone and activate voice recognition control. The multi-information display can also be operated and the vehicle status checked.

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The Smart Entry and Push-Button Start system detects an electronic key carried by the driver when it comes within close range of the vehicle. The door unlocks as the handle is touched and, once inside, the driver can start the engine simply by pressing the button on the dashboard. As well as making life easier, it also removes the need for an ignition lock on the steering column, reducing the risk of injury to the driver's legs in an impact.

There is full leather upholstery, with electric adjustment and heating for the driver and front passenger seats; the driver's seat has three memory settings.

Four-wheel Active Height Control and Adaptive Variable Suspension (FHC & AVC) are also provided as standard, as detailed in driving dynamics section of this press pack.

Competitor Comparisons

The new Land Cruiser V8's technical sophistication and high equipment specification do not come at a prohibitive price, in fact the model represents better value for money than any of its principle market rivals.

It offers as standard features that are extra-cost options or are unavailable on contenders from Land Rover, Mercedes-Benz, Audi, Volkswagen and BMW. On the basis of a full specification comparison, the competitor models are between 0.3 and 23 per cent more expensive than the Toyota, as the table below illustrates.

Manufacturer	**Toyota**	**Land Rover**	**Volkswagen**	**Mercedes-Benz**	**BMW**	**Audi**
Model	Land Cruiser V8	Range Rover 3.6 TDV8 Vogue	Touareg 5.0 V10 TDI SE	GL420 CDI	X5 3.0sd M Sport	Q7 4.2 TDI S Line
OTR price	£55,995	£62,600	£54,867	£63,872	£47,675	£50,990
Smart entry	•	-	•	Opt	Opt	Opt
Full-map satellite navigation	•	•	•	•	•	Opt
Limited-slip differential	•	•	•	•	-	•
20in alloy wheels	•	Opt	Opt	Opt	Opt	•
6-DVD autochanger	•	-	-	-	-	-
Front knee airbags	•	•	-	-	-	-
Full specification adjusted price	£55,995	£67,105	£59,812	£69,067	£56,172	£59,385
Price adjustment vs Land Cruiser V8	-	+20%	+7%	+23%	+0.3%	+6%

Data provided by JATO, correct at November 2007.

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50 years of motor sport: Achievements in the Paris-Dakar Rally

50 years of motor sport: Achievements in the Paris-Dakar Rally

History

The Paris-Dakar Rally, considered the world's most demanding motor sports race, was created in 1979 by French adventurist Thierry Sabine. Since 1981 it has been recognized as an official race of the Federation Internationale de l'Automobile and Federation Internationale de Motocyclisme. The 2007 rally marked its 29th running.

The official name of the rally in French is "le Dakar", but it is commonly referred to simply as the "Paris-Dakar". Each year, the lead sponsor and/or the location is added to the name. For example, the official name of the rally that started in Lisbon on 6 January 2007 was the Euromilhoes Lisbon-Dakar 2007.

The Route

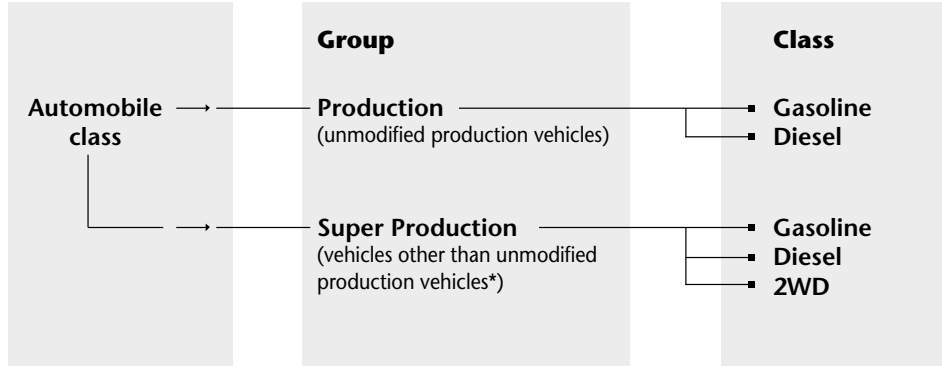
The race typically begins on 1 January in front of Versailles Palace in the outskirts of Paris. Amid applause and vocal support from spectators, the racers head off for the Sahara Desert. The race runs down through Barcelona, Spain, and then crosses onto the African continent. After 5,000 to 6,000km of competition, it ends in Senegal's capital city: Dakar.

In all, about 450 vehicles will race through torrid 50-degree heat for two to three weeks to reach the finish line. Because the race traverses the punishing Sahara Desert – with virtually no towns or emergency facilities available – many injuries, and in some cases even deaths, have occurred. One of the other reasons why the rally is known as the world's most demanding race is that the course also travels through politically unstable territories, such as Western Sahara. The race's actual route changes annually; some years both the start and finish lines have changed. Regardless of whether the start, the finish or the route are different, the race is still often referred to as the Paris-Dakar Rally.

Vehicle Categories

One of the biggest characteristics of this race is that, unlike the WRC (World Rally Championship), both professionals and amateurs are able to enter the race. In addition, a large variety of vehicle types can be entered, including passenger cars, sports cars, sidecars, buggies and more. Vehicles can range from unmodified production models to one-of-a-kind customized cars. As a result, only the Paris-Dakar Rally features such a wide and well-rounded variety of machines.

The four-wheel vehicle category of the Paris-Dakar Rally is broadly divided into the two categories of prototype or modified production vehicles and unmodified production vehicles. In addition to typical four-wheel passenger cars, other vehicles used in the race include motorcycles (motor), trucks (camions) and buggies. In the past, these categories consisted of three groups: T1 (unmodified production vehicles), T2 (production-based modified vehicles), and T3 (prototype vehicles). For automobiles, the camion class was also added to these groups. However, in 2001 the group classifications were modified as follows:



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Toyota Land Cruiser Achievements in the Paris-Dakar Rally

1995 – 17th: Granada-Dakar

This marked the first year of Team Araco's (Now TLC) entry, which raced a single Land Cruiser 80 in the unmodified production diesel class. It also formed part of the commemoration of the Land Cruiser reaching 2.5 million production units. Although the Land Cruiser maintained first place for the first half of the race, on the first day of the second half, the team lost its supporting truck to the Mauritania desert. Despite the lack of replacement parts, the Land Cruiser battled on. Although it was not able to capture the class championship, the Toyota managed to finish the race fourth in its class.

Vehicle No. 1 - Asaga-Ito: 4th in its class

1996 – 18th: Granada-Dakar

In its second year, Team Araco sought to increase its chances of winning by entering two Land Cruiser 80s. The first vehicle carried the same members as the previous year, while the second featured veteran French rally driver G. Sarazan and Araco employee (now Toyota Auto Body) Takashi Fujisawa as navigator for the gruelling challenge. As other entrants fell out of the race, the two Land Cruiser 80s led the entire challenge and took 1st and 2nd places in their class. The vehicles also claimed the top two positions for all diesel vehicles, proving the robustness of the Land Cruiser in the world's most prominent rally.

Vehicle No. 1 - Asaga-Ito: 2nd in its class

Vehicle No. 2 - Sarazan- Fujisawa: 1st in its class

1997 – 19th: Dakar-Agades-Dakar

The Team Araco (now TLC) line-up was the same as the previous year, with the two Land Cruiser 80s and same team members, but with Araco employee (now Toyota Auto Body) Yoshihiro Ito, the previous year's team manager, taking over as team director. This served as a new challenge for Toyota Team Araco. Vehicle No. 2 demonstrated blazing speed, but unfortunately flipped over at high speed in the tenth stage and had to retire. Perhaps inspired by this, Vehicle No. 1 picked up the pace and began its assault on its rivals ahead. Although it could not catch the leaders, it was able to finish second in its class.

Vehicle No. 1 - Asaga-Ito: 2nd in its class

Vehicle No. 2 - Sarazan-Fujisawa: retired

1998 – 20th: Paris-Granada-Dakar

The line-up of two Land Cruisers remained unchanged, but Hajime Ito (Araco employee, now Toyota Auto Body) was appointed as the navigator for Vehicle No. 1, while Tadahiro Tsuzuki was appointed as the team director. The race was highly demanding – about half the entrants dropped out in the first half of the race. Despite this, the team's Land Cruiser 80s thoroughly demonstrated their tremendous potential, sweeping the top two positions in their class and putting a gap of over 13 hours between themselves and the third-placed finisher. This marked the final run for the Land Cruiser 80, of which about 537,000 units had been produced since 1990.

Vehicle No. 1 - Asaga-Ito: 2nd in its class

Vehicle No. 2 - Sarazan-Fujisawa: 1st in its class

1999 – 21st: Granada-Dakar

The 21st rally marked the first entry for the Land Cruiser 100 and the fifth consecutive entry for Team Araco. The drivers for the two vehicles remained the same while the navigators were changed, marking the debut of G. Trouble, who navigated the second vehicle. This also was the last race as a driver for 59-year-old G. Sarazan, making it an important event – would he end his career in victory? Because this was the first competition for the Land Cruiser 100, many tests were performed prior to the race, primarily to check the strength around the independent front suspension. The rally was started with confidence and, continuing from the previous year, the two vehicles were able to finish first and second in the unmodified production diesel class, placing over 10 hours between themselves and the third-placed finisher. Claiming an impressive victory on its debut, the new Land Cruiser 100 demonstrated its power to the world.

Vehicle No. 1 - Asaga-Fujisawa: 2nd in its class

Vehicle No. 2 - Sarazan-Trouble: 1st in its class

2000 – 22nd: Paris-Dakar-Cairo

The first Paris-Dakar Rally course to traverse Africa started out with a planned total distance of over 10,000km. However, the distance was shortened when four days were cancelled due to information about terrorist activity. New drivers Ratet and Garcin in Vehicle No. 2 teamed up for an effective all-French combination and fully tapped the great potential of the already mature Land Cruiser 100. For the third year in a row, Toyota finished first and second in the unmodified production diesel class.

Vehicle No. 1 - Asaga-Fujisawa: 2nd in its class

Vehicle No. 2 - Ratet-Garcin: 1st in its class

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2001 – 23rd: Paris-Dakar

This year marked five decades since the creation of the Land Cruiser. The team remained the same from the previous year, while the rally was held over a longer-than-usual 21 days. This extension, and the new restriction of no air mechanic support, turned the race into a relentless battle. Vehicle No. 2 suffered major damage to its left front suspension, but the strengthened supporting squad helped overcome this. Although Vehicle No. 1 had to retire due to engine trouble in the 17th stage, thus preventing another first-second sweep, Vehicle No. 2 was able to win the championship for its class.

Vehicle No. 1 - Asaga-Fujisawa: retired

Vehicle No. 2 - Ratet-Garcin: 1st in its class

2002 – 24th: Arras-Madrid-Dakar

The sudden death of former team general director Takehiko Arakawa compelled the team to fulfil his wishes of capturing a fifth straight title and another first-second finish. Mounting a furious charge in the newly-introduced two-day consecutive marathon stage, Vehicle No. 2 rose quickly in the standings to capture first place for the entire unmodified production group and ninth place overall, which was the best finish ever for Toyota. Driver Asaga and new navigator Daisuke Arakawa in Vehicle No. 1 also captured second place.

Vehicle No. 1 - Asaga-Arakawa: 2nd in its class

Vehicle No. 2 - Ratet-Garcin: 1st in its class

2003 – 25th: Telefonica-Dakar

This year's course started in Marseille, France, and crossed the African continent eastwards towards the finish line of Sharm el Sheikh in Egypt. For the first time, the team entered three vehicles, including a gasoline vehicle, with the heightened goal of capturing a group victory in the entire unmodified production group. Expectations were high for Vehicle No. 3; its driver Katayama had rich experience in many speed races. Unfortunately, the team was saddled with several problems right from the start. Particularly vexing was an electrical issue with the fuel pump that led to the engine not starting, and repeated air intake problems caused by the fine, powder-like sand typical of volcanic regions. For vehicles in the unmodified production class, the air cleaner opening was not permitted to be modified, leaving the only option of cleaning the filter carefully by hand. Finally, in the 12th stage, this nightmarish adventure ended prematurely for Vehicle No. 3 as it flipped over and was forced to retire. However, Vehicles 1 and 2 ran smoothly and continued their winning streak by finishing in the top two places in the unmodified production diesel class.

Vehicle No. 1 - Asaga-Arakawa: 2nd in its class

Vehicle No. 2 - Ratet-Garcin: 1st in its class

Vehicle No. 3 - Katayama-Trouble: retired

2004 – 26th: Telefonica-Dakar

In its tenth year of participating in the Paris-Dakar Rally, Toyota Team Araco (now TLC) departed the start in Clermont-Ferrand, France, in its quest for a seventh straight title. Continuing the approach of the previous year, the team was made up of three vehicles. The Vehicle No. 3 team, featuring driver Ukyo Katayama, had been to the Moroccan desert for training and vehicle testing in 2003. However, all three vehicles encountered minor problems and eventually had to retire. Vehicle No. 3 proceeded valiantly, with team Katayama-Arakawa battling on, but sadly had to give up just before reaching the finish line of the 16th stage. The percentage of vehicles finishing this year's race was at an unprecedented low, with only around 10 per cent of vehicles in the unmodified production diesel class completing the rally. Although Toyota's number of consecutive victories ended at six, the team thoroughly analyzed the reasons behind the results and vowed to use this experience as an incentive for even greater future success.

Vehicle No. 1 - Asaga-Ito: retired

Vehicle No. 2 - Ratet-Lame: retired

Vehicle No. 3 - Katayama-Arakawa: retired

2005 – 27th: Telefonica-Dakar

Once again, Toyota's Paris-Dakar team was to enter three Land Cruiser 100s, but this time it would be under the banner of Team Land Cruiser Toyota Auto Body (TLC), rather than the title of Toyota Team Araco. Given that all three vehicles had retired from the 2004 race, this year presented an opportunity for redemption as the team members were largely unchanged. The only exceptions were an employee from Toyota Auto Body, Yasushi Numata, who was selected as navigator for Vehicle No. 3, while Hajime Ito, who had served in dual roles as navigator and director, solely focused on his position as director. The three Toyota Land Cruisers maintained the lead in their class from the crossing of the Mediterranean Sea. The team continued to steadily improve their position as they entered the African stage, but then began to encounter trouble on the seventh day when the vehicles entered the desert stages. Despite this, the team overcame all problems and regained their first-second-third placings in the ninth stage and crossed the finish line in the same order. Finishing in the top three positions of the overall unmodified production group was a Dakar Rally first.

Vehicle No. 3 - Asaga-Numata: 1st place in its class

Vehicle No. 2 - Ratet-Cattarelli: 2nd place in its class

Vehicle No. 1 - Katayama-Arakawa: 3rd place in its class

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2006 – 28th: Euromilhoes Dakar

Continuing from the previous year, TLC entered three Land Cruiser 100s for the race. The newly hired Yoshio Ikeda teamed with Daisuke Arakawa (a Toyota Auto Body employee) in Vehicle No. 1, while Vehicle No. 2 again featured the French combination of JJ Ratet and Bruno Cattarelli. Vehicle No. 3 had the reigning champion pair of Toshinori Asaga and Yasushi Numata (also Toyota Auto Body employees). The three Land Cruiser 100s managed to navigate the European stage, which typically causes heavy damage to vehicles, without incident and headed to the African stage where it could further demonstrate its ability. The first half of the race ended with Vehicle No. 2 in first place and Vehicle No. 1 in second place of the T2 group, and Vehicle No. 3 rising to fourth place in the T2 diesel group. Unfortunately, Vehicle No. 3 later experienced problems and suffered damage to its rear differential – and because the unmodified production category prohibits changing major parts, the team was forced to remove it. Meanwhile, Vehicles Nos. 1 and 2 continued steadily and maintained their leads to again finish first-second in the T2 group. And, despite its problems, Vehicle No. 3 was able to finish the race 26th overall. The Land Cruisers were again able to demonstrate their toughness and high level of performance.

Vehicle No. 1 - Ikeda-Arakawa: 2nd place in its class

Vehicle No. 2 - Ratet-Cattarelli: 1st place in its class

Vehicle No. 3 - Asaga-Numata: No placement within class; 26th overall

2007 – 29th: Euromilhoes Dakar

TLC once again entered three Toyota Land Cruisers in this year's race. The line-up had changed from the previous year: Vehicle No. 1 featured the combination of Ratet and Cattarelli, Vehicle No. 2 had Mitsuhashi and Miura (employee navigator), while Yamada and Arakawa commanded Vehicle No. 3. In the first Special Stage, the three got off to a good start, placing themselves first-second-third. On day seven, the last stage of the first half of the race, the vehicles faced a difficult stage covering more than 600km of varying terrain, including pistes, off-road challenges and dunes. Vehicle No. 2 maintained first place, Vehicle No. 1 maintained third place and Vehicle No. 3 was right behind at fourth place. While other cars competed viciously, the three TLC Toyota Land Cruiser 100s were still able to demonstrate their inherent high level of toughness. At the end of the tenth day, Vehicle No. 2 was in first place, Vehicle No. 1 was in second, and Vehicle No. 3 was in fourth position as excitement built up for the final stage. Unfortunately, the next day, Vehicle No. 1 suffered mechanical problems that caused it to veer off course and have an accident. The other two vehicles kept a safe margin while continuing to push forward, with Vehicle No. 2 finishing fourth in the end. Vehicle No. 3, which had employed a strategy of backing up No. 2, was even able to finish third. On January 21, Vehicle No. 2 won the unmodified production group, marking the third consecutive victory for TLC in the same category, an achievement that had never before been accomplished.

Vehicle No. 1 - Ratet-Cattarelli: retired in 11th stage

Vehicle No. 2 - Mitsuhashi-Miura: 1st place in its class

Vehicle No. 3 - Yamada-Arakawa: 3rd place in its class

Land Cruiser V8 specifications and equipment table

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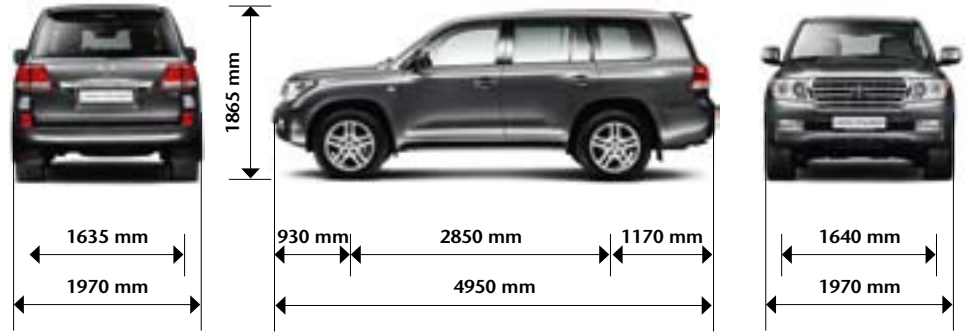
Specifications

Engine	
Engine type	1VD-FTV
No of cylinders & arrangement	V8
Valve mechanism	32-valve DOHC
Block material	Cast iron
Head material	Cast iron
Bore & stroke (mm)	86.0 x 96.0
Displacement/capacity (cc)	4,461
Compression ratio	16.8:1
Fuel system	Common rail
Injection pressure (bar)	1,800
Max. power (bhp/DIN hp @ rpm)	282/286 @ 3,600
Max. torque (Nm @ rpm)	650 @ 1,600–2,900

Performance	
Max. speed (mph)	130
Acceleration 0-62mph (sec)	8.2

Exterior dimensions	
Length (mm)	4,950
Height (mm)	1,865
Width (mm)	1,970
Wheelbase (mm)	2,850
Track - front (mm)	1,640
Track - rear (mm)	1,635
Overhang - front (mm)	930
Overhang - rear (mm)	1,170
Coefficient of drag	0.35



Interior dimensions	
Length (mm)	2,715
Height (mm)	1,200
Width (mm)	1,640
Luggage compartment capacity – third row in place (l)	259
Luggage compartment capacity – third row folded (l)	701
Luggage compartment capacity – second and third row folded (l)	1,267

Weights and capacities	
Kerb weight (kg)	2,555
Gross vehicle weight (kg)	3,300
Towing capacity – braked (kg)	3,500
Towing capacity – unbraked (kg)	750
Fuel tank capacity (l)	93

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Off-road performance	
Approach angle (°)	31
Departure angle (°)	23
Ramp angle (°)	24
Rollover angle (°)	44
Angle of climb (°)	45
Minimum running ground clearance (mm)	225
Front axle clearance (mm)	235
Rear axle clearance (mm)	225
Wading depth (mm)	700

Approach angle 31°

Ramp break over angle 24°

Departure angle 23°

Transmission	
Transmission Type	Six-speed automatic, full-time four-wheel drive
Gear ratios	
1st	3.333
2nd	1.960
3rd	1.353
4th	1.000
5th	0.728
6th	0.588
Reverse	3.061
Differential gear ratio (front)	3.909
Differential gear ratio (rear)	3.909

Tyres and wheels	
Wheels (in)	20
Tyre size	285/50R20

Fuel consumption, emissions, VED	
Urban (mpg)	23.5
Extra urban (mpg)	31.0
Combined (mpg)	27.7
CO_2 emissions (g/km)	270 (target)
CO emissions (g/km)	0.07
HC emissions (g/km)	0.01
NOx emissions (g/km)	0.34
HC + NOx emissions (g/km)	0.34
PM (g/km)	0.03
VED band	G
Noise, drive-by (EU directive) dB (A)	71

Suspension	
Front	Double wishbone
Rear	4-link coil with lateral rod

Brakes	
Front (size mm)	Ventilated discs 340 x 32
Rear (size mm)	Ventilated discs 345 x 18

Steering	
Steering Gear Type	Rack & pinion
Steering Gear Ratio	14.2 – 17.6:1
Power Steering Type	Integral
Min. Turning Radius – Tyre (m)	5.9

Equipment table

Safety	
Driver and front passenger front airbags	•
Driver and front passenger knee airbags	•
Front and second row rear side airbags	•
Front, second and third row Curtain Shield airbags	•
Front and rear parking sensors	•
Pre-Crash Safety system (PCS)	•
Multi-terrain ABS	•
Electronic Brakeforce Distribution (EBD)	•
Brake Assist (BA)	•
Variable Gear Ratio Steering (VGRS)	•
Height adjustable front seatbelts	•
Front seatbelt pretensioners with force limiters	•
ISOFIX child seat fixings	•
Vehicle Stability Control (VSC)	•
Active Traction Control (A-TRC)	•
Downhill Assist Control (DAC)	•
Hill-start Assist Control (HAC)	•
Whiplash Injury Lessening (WIL) front seats	•
Active front headrests	•
Automatic door locking	•

Off-road	
Permanent 4WD	•
Torsen® limited slip differential	•
4-Wheel Active Height Control and Adaptive Variable Suspension (4W AHC & AVS)	•

Comfort & convenience	
Folding, heated, electrochromatic door mirrors	•
Smart Entry and Start system	•
Cruise control	•
Six-speed automatic transmission	•
40:20:40 split/folding second row rear seats	•
Two third row seats with easy folding stowage	•
12v accessory power outlet	•
Front and rear electric windows	•
Full-map satellite navigation with Bluetooth connectivity	•
Voice control for navigation and ventilation functions	•
Multi-information display screen	•

Rear view monitor with park assist system	•
Front and rear parking sensors	•
Auto-dipping electrochromic rear view mirror	•
Rain sensing windscreen wiper system	•
Dusk-sensing headlights	•
Optitron instrument display	•
Four-zone climate control air conditioning	•
Independent dual zone rear air conditioning controls	•
Electric tilt/slide sunroof	•
Electric multi-adjustable heated front seats	•
Memory function for driver's seat	•

Audio	
Nine-speaker Pioneer audio system	•
Six-disc DVD autochanger	•
Digital tuner	•
MP3 and WMA file playing (from disc)	•
Premium ICE Pack (twin seatback 8in DVD units with USB stick/SD card compatability)	opt
Premium Audio Pack (JBL premium sound system with 12 speakers, 440W DSP amplifier and iPod integration kit)	opt

Security	
Remote alarm and transponder immobiliser	•
Remote control central locking with double locking	•
Locking wheel nuts	•

Upholstery & trim	
Wood interior trim	•
Full leather upholstery	•
Leather covered steering wheel and gear shift knob	•

Exterior & body	
Halogen headlamps with levelling function	•
Titanium effect front grille	•
Headlamp washers	•
20in Alloy wheels	•
Front and rear mudguards	•
Side Steps	•
Rear spoiler	•

TOYOTA

Exterior colours

Tyrol Silver

Decuma Grey

Astral Black

Regency red

Fir Green

Slate Blue

The details of specifications and equipment provided in this press information are subject to local conditions and requirements and may, therefore, vary from country to country. Toyota Motor Europe reserves the right to alter any details of equipment and specifications without prior notice.