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Track all-star

Performante

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to take on Lamborghini Huracan

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FORD RANGER RAPTOR

Jurassic bark

Twin-turbo 2.0-litre diesel pumps out 157kW/500Nm in Ford's flagship Ranger Raptor

By TIM ROBSON

ORD Australia has revealed its most aggressively designed and highly specified dual-cab ute, the Ranger Raptor, ahead of a mid-year launch in Australia. Unveiled in Bangkok, the Thai-built Ranger Raptor marks a big departure from the stock PX II Ranger, gaining Ford's new twin-turbo 2.0-litre diesel engine, 10-speed automatic transmission, updated chassis with a new Watts link-equipped rear suspension and off-road Fox Racing shock absorbers, and rear disc brakes.

The smaller but more powerful twin-turbo, four-cylinder diesel engine makes 157kW and

500Nm, making it the strongest Ranger in the local line-up, despite its diminutive size.

Ford Performance chief engineer Jamal Hameedi said driving the Raptor made a person feel like a hero.

"Just like the (US market) F-150 Raptor, the Ranger Raptor builds upon the core capability of the range of vehicles it comes from and carries the unmistakable Ford Performance DNA appearance which people instantly recognise," he said.

The high-riding Ranger Raptor's design is said to be inspired by the unique silhouette and construction of desert-racing Trophy Trucks.





Compared with current range topper, the Wildtrak, the Raptor is 330mm wider (2180mm), and sits on a track widened by 150mm at each end. It is also rides 25mm taller at 1873mm and 9mm longer at 5398mm.

A new grille, bonnet and wider composite front mudguards combine with an all-new rear tub housing a tray 1560mm wide and 1643mm long. Large rear wheel arches and an all-new rear end complete the aggressive design, which was overseen by Ford's Tasmanian-born Asia-Pacific head of design, Todd Willing – the man behind the 2015 Ford GT.

The Raptor's new 2.0-litre four-cylinder engine is 1.2 litres and one cylinder smaller than the 3.2-litre five-cylinder engine that will continue to be used in the Ranger line-up, and 200cc smaller than the Ranger's entry-level 2.2-litre four-cylinder turbo diesel.

Despite that, its output of 157kW and 500Nm is 39kW and 115Nm more than the 118kW/385Nm of the 2.2, and 10kW and 30Nm more than the 147kW/470Nm of the 3.2.

The high-compression EcoBlue diesel – which is also offered in a single-turbo applications for Ford's commercial vehicles such as the Transit – has a pair of turbochargers on the hot side of the longitudinally mounted inline engine, with a large intercooler in front of the radiator.

The turbos are staggered in size, with the smaller unit spinning up earlier in the rev range before the larger unit takes over to provide boost higher up.

The engine sends power to all four wheels via



RAPIER

a transfer case that offers low-range capability, and the Raptor uses Ford's new 10-speed torque-converter automatic transmission that is also set to debut in the updated 2018 Mustang.

The 10-speed auto – a first in any type of pick-up – features magnesium paddle shifters that can be used to override gear selection at any time.

It has six drive modes – Normal, Sport and Weather in 2WD guise, Mud/Sand and Baja (both 4WD) and Rock/Gravel (4WD Low only).

The Baja mode is the most aggressive, winding back traction and stability control and changing the shift map to hold gears for longer. The Raptor is only rated to tow 2500kg – 1000kg less than the 3.2-litre engine-equipped Ranger with a braked trailer. No weights were provided.

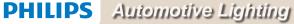
Chassis-wise, the Raptor uses the same MacPherson strut front arrangement as the regular Ranger up front, albeit with longer springs and US-made Fox Racing Shox dampers.

No anti-roll bars are fitted to the Raptor.

The rear end, meanwhile, has been completely made over, with a Watts linkageequipped coil-sprung axle with Fox inline dampers. This makes it only the second dualcab 4x4 on sale in Australia after the Nissan Navara with a coil-sprung rear.

The Fox shocks are Performance Series





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inline units that are mounted separately to the coil spring in the rear, while the forged alloy upper and cast alloy lower links save weight over similar steel items.

The chassis rails of the Ranger Raptor have been strengthened with additional reinforcement for the front shock towers and new hard-mount points for the rear end.

Braking has been upgraded, with larger front rotors and two-piston callipers up front, and a disc-brake upgrade for the rear in place of the standard drums.

The final piece of the chassis puzzle is the addition of 17-inch dark-coloured alloy rims, fitted with high-spec 285/70 R17 all-terrain tyres from Michelin-owned BF Goodrich. Along with the long-travel suspension, the

large wheel and tyre package raises the ride height of the Raptor to 283mm, 46mm higher than the Wildtrak.

Meanwhile, the interior of the Raptor sports an 8.0-inch SYNC3 multimedia screen, along with bespoke sports seats, a new steering wheel, leather and suede-acccented trim, magnesium shifter paddles, dual-zone air conditioning and the Ranger's standard suite of driver aids that include AEB, lane departure control and warning, as well as driver alert and automatic high-beam.

The Raptor joins an increasing array of 4x4 pick-ups with extended feature sets like the HSV Colorado Sportcat, Toyota's latest HiLux Rugged X and the more powerful Volkswagen Amarok V6 Ultimate.



Arovert

M MX 4001

Second-generation BMW X4 retains eye-catching sloped roof design

By RON HAMMERTON

JUST four years after launching its firstgeneration X4 coupe SUV, BMW has popped out an all-new model, again based on the near-identical X3 wagon that arrived in Australia in its latest form in November.

The liftback X4 will be publicly unveiled at

next month's Geneva motor show before being launched in Australia in June, with deliveries starting in the third quarter.

The speed with which the latest X4 had been brought into production reflects BMW's decision to develop it more in parallel with the X3 this time around. Style-wise, the new version has nothing to shock current fans, with evolutionary changes to most elements, including the kidney grille that, like the X3's, is more pronounced than before.

Like the X3, the X4 is bigger in most dimensions, growing 81mm in length (4752mm) and 37mm in width (1918mm).

At 2873mm, the wheelbase is 54mm longer, reflecting the switch to BMW's modular CLAR architecture that underpins the German company's new-generation models, including the 7 Series, 5 Series, X3 and upcoming X5, among others.

The bigger dimensions have contributed





to an extra 27mm of legroom for rear-seat passengers, along with an extra 25 litres of luggage space, taking the boot capacity to 500L (25L more than the GLC Coupe).

The vehicle also sits a few millimetres lower than before, aiding handling, BMW says. A 50/50 weight distribution helps too.

With a ground clearance of 204mm and a wading depth of 500mm, the X4 has a measure of off-road ability.

With more aluminium and high-strength steel components this time, the new X4 is

between 15kg and 50kg lighter – depending on the variant – than the superseded model that last year outsold the similarly conceived Mercedes-Benz GLC Coupe in Australia by 1500 to 1063.

A slippery shape - this time 0.30Cd - is

helped by active air vents into the grille that close in cool conditions.

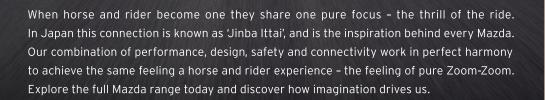
In Europe, the X4 will be offered with the same three petrol and four diesel powertrains as the X3, but BMW Group Australia is yet to confirm the line-up for this market.





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Pricing is also still under wraps, but expect a premium of up to \$10,000 over the X3 that starts at \$63,800 plus on-road costs for the entry-level petrol four-cylinder xDrive20i and \$67,800 for the diesel xDrive2.0d.

For Australia, the top diesel offering will probably be the 3.0-litre turbo diesel xDrive30d, with its 195kW/620Nm output.

Later this year, we would expect the launch variants to be joined by an M-enhanced M40i packing 265kW of power and 500Nm of torque from its six-cylinder turbocharged 3.0-litre petrol engine.

Apart from a beefier engine, the M40i gets an M Sport exhaust system, M-specific suspension, steering and brakes, and an M Sport differential lock, plus bigger wheels and a few cosmetic niceties.

The X3 M40i is priced from \$99,900, meaning the X3 version will be north of 100,000 - a first for the nameplate.

M MX 400

A diesel M40d with 240kW and 680Nm will be offered in Europe, but seems unlikely for Australia.

All engines will come with ZF's tried and true eight-speed automatic transmission and xDrive all-wheel-drive system in its latest iteration that is said to be both lighter and more efficient that before.

Driving modes in entry variants will include comfort, eco-pro and sport, with top-end variants getting an extra sports plus mode.

Alloy wheels will range from 18 inches to 21 inches, depending on the variant and option pack.





Ferrari lobs 530kW/770Nm 488 Pista to take on Lamborghini Huracan Performante

By JUSTIN HILLIARD

ERRARI has finally unshackled its most powerful V8 model yet with the hardcore, track-focused 488 Pista breaking cover ahead of an international debut at the Geneva motor show next month.

While Ferrari Australasia has confirmed the 488 Pista for an Australian launch, exact timing for its arrival remains up in the air. Similarly, whether examples from the production run are still available to purchase is unknown.

The 488 Pista's formula is simple on paper, it takes the 488 GTB and dials performance, handling and aerodynamics up to 11 to create one of the most formidable Prancing Horse models yet.

Motivated by a 3.9-litre twin-turbocharged V8 petrol engine, the 488 Pista punches out 530kW of power at 8000rpm and 770Nm of torque at 3000rpm when in seventh gear.

These outputs best those of the 488 GTB by 38kW and 10Nm. While the latter is only slightly up, Ferrari says torque is higher at all engine speeds, "delivering a feeling of consistently smooth, powerful acceleration with even faster turbo response times despite the increase in power".

This translate to a blistering sprint from zero to 100km/h in 2.85 seconds while on the way to 200km/h in 7.6s and a top speed of more than 340km/h.

Comparatively, the 488 GTB is slower by







0.15s, 0.7s and at least 10km/h respectively.

Just like the 488 GTB, the powertrain is midmounted and sends drive exclusively to the rear wheels via a seven-speed dual-clutch automatic transmission.

Specific upgrades to the powerplant include Inconel exhaust manifolds, a lightweight crankshaft and flywheel, turbochargers with integrated rev sensors, and a redesigned air intake line – all of which were lifted from the 488 Challenge racecar – plus titanium con rods and carbon-fibre intake plenums.

Engine sound quality and intensity "are higher than the 488 GTB in all gears and at all engine speeds in proportion with the progressive increase in power", the company says.

As mentioned, aerodynamics have been honed thanks to the adoption of a Formula 1-inspired S-Duct – or serpentine inlet – which improves airflow in conjunction with the redesigned front diffusers that feature a ramp angle optimised for the 488 GTE racecar to provide stronger suction and downforce.

Furthermore, the underbody vortex generators and rear diffuser have been tweaked, while the rear duck-tail spoiler is taller and longer than before.

These adjustments result in a 20 per cent increase in downforce.

The 488 Pista also ushers in Ferrari's sixthgeneration Side-Slip Angle Control system which incorporates its E-Diff'3, F1-Trac, magnetorheological suspension (SCM) and Ferrari Dynamic Enhancer (FDE) systems, with the latter a first time inclusion.

Claimed by the marque to be a world-first, FDE uses software to adjust the brake pressure at the callipers, meaning handling through and out of corners is "even more effortless, intuitive and predictable".

Continuing the lightweight focus, the interior



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has been stripped out to the bare essentials, contributing towards the 1280kg dry weight – 195kg lighter than the 488 GTB.

Its lightest form is achieved when 20-inch carbon-fibre wheels – a Ferrari first – and a carbon-fibre engine cover, bumpers and rear spoiler are optioned.

The brand says all of these upgrades serve to complete "an uncompromising mission to offer track-like performance on and off the road, even when in the hands of non-professional drivers."

Additionally, the Pista name pays homage to the brand's "unparalleled heritage in

motor sports", with the Italian word directly translating to 'track' in English.

Needless to say, the Lamborghini Huracan Performante will have its hands full dealing with the 488 Pista, but its outputs of 470kW and 600Nm, and triple-digit sprint time of 2.9s will keep things interesting.

Given the 488 GTB commands a sticker price of \$469,888, expect the 488 Pista to attract a healthy premium when it hits local showrooms.

The 488 Pista is the fourth model in Ferrari's V8-engined special-edition range, joining the former 360 Challenge Stradale, 430 Scuderia and 458 Speciale.



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PORSCHE 911 GT3 RS

EEEEECCEDI

Porsche tunes naturally aspirated 4.0-litre flat-six to 383kW/470Nm in new GT3 RS

S GO 5099

By JUSTIN HILLIARD

PORSCHE has whipped the covers off its facelifted 911 GT3 RS, and the German car-maker's most powerful naturally aspirated sportscar is set to hit Australian showrooms in the fourth quarter this year priced from \$416,500 before on-road costs. Set for its international debut at the Geneva motor show next month, the new GT3 RS is \$29,200 dearer than the model it replaces and attracts a \$89,700 premium over the updated regular GT3 that went on sale late last year.

The GT3 RS' motorsport-derived 4.0-litre atmo flat six-cylinder petrol engine returns

to the action, this time punching out 383kW of power and 470Nm of torque – increases of 15kW and 10Nm over its predecessor and the latest GT3.

These swollen outputs translate to improved acceleration, with the GT3 RS now knocking down the sprint from zero to 100km/h in 3.2 seconds - 0.1s quicker than before - on the way to a top speed of 312km/h, up 2km/h.

As before, drive is exclusively sent to the rear wheels via a seven-speed PDK dualclutch automatic transmission which has been specially calibrated to mate well with the highperformance engine that offers a screaming



redline of 9000rpm.

Unlike the newest GT3, the GT3 RS is once again not available with a six-speed manual gearbox.

Performance has been further honed with a recalibration of the rear-wheel-steering system that turns the rear wheels the same way as the front ones at high speeds or the opposite way when travelling at low speeds. Either way, Porsche promises "maximum dynamics and precision".

As per the 991.2 facelift that has been slowly rolled out to all 911 variants, the GT3 RS also picks up tweaked headlight and tail-light designs, and mildly restyled front and rear bumpers.

The eye-catching rear wing spoiler remains in all its glory, this time mounted on the new lightweight rear lid.

The GT3 RS rolls on a mixed set of lightweight alloy wheels, comprised of 20-inch rims wrapped in 265/35 tyres up front and 21-inch hoops shod in 325/30 rubber at the rear. Porsche says the former "enhance agility and steering behaviour" while the latter "improve traction".

Inside, changes are less apparent, save for the addition of the latest 7.0-inch PCM touchscreen infotainment system, but bucket seats made of carbon-fibre are standard fair.

As is the case with all current GT-branded 911s, the Clubsport package is a no-cost option that adds a rollover bar, a manual fire extinguisher, preparation for a battery disconnect switch and a six-point seatbelt – all in

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honour of a full-on track experience.

Additionally, the optional Weissach package provides a further weight reduction with extra carbon-fibre components for the chassis, interior and exterior, as well as a magnesium wheel option.

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In its lightest form, the Weissach package reduces the GT3 RS' weight to 1430 kilograms – 10kg heavier than before – but pricing is yet to be confirmed by Porsche Cars Australia (PCA).

Claimed fuel consumption on the combined cycle test is 12.8 litres per 100 kilometres, up 0.1L/100km, while carbon dioxide emissions have been tested at 291 grams per km, down 5g/km.

The GT3 RS is the third GT-branded 911 sportscar to launch in the past year, following the GT3 from the 2017 Geneva show and GT2 RS from the 2017 Goodwood Festival of Speed.

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Sales of the 911 steadily increased last year, with 431 examples sold to the end of 2017, representing a 2.1 per cent improvement over the 422 deliveries made in 2016.

This effort resulted in the Porsche becoming the best-selling model in last year's over-\$200,000 sportscar segment, placing it ahead of all Ferrari models (210 units), the Mercedes-AMG GT (149) and all Aston Martin models (134).

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