MOTOR VIKATAN VOLUME: 2 ISSUE: 3





TVS RONIN
A New Interpretation



ROYAL ENFIELD HUNTER 350
A DIFFERENT THUMP



REVOLUTIONISING HYBRIDS IN INDIA NEW MARUTI ALTO K10 PEPPIER AND MORE FUNTO DRIVE



fter three years Maruti Suzuki re-launched its famous entry-level car Alto K10. In 2019, when the BS6 emission norms kicked in, Maruti Suzuki discontinued the K10 and offered only the Alto 800. Now, this new K10 is built on the safer Heartect platform to meet the current safety norms. With the new Alto K10, Maruti is looking

at attracting two-wheeler owners aspiring to get into an affordable entry-level small car. The Alto brand was inaugurated in 2000 and to date, the company has sold more than 43 lakh Altos and has a market share of around 90 per cent in the segment.

To attract new-age customers, Maruti engineers have worked on redesigning the car and added more features to it. The latest Alto has grown in terms of size and feature list. From the previous version, the new Alto's wheelbase is now 20mm longer, the ground clearance has increased by 7mm, taller by 45mm and the overall length is increased by 80mm. The new Alto K10 is 3,530mm in length giving it a more spacious cabin.

In terms of overall look, there



are some very significant design updates in the new Alto, primarily on its face. The grille is now bigger than before and has a honeycomb design. The headlight units are now sleeker but there are no fog lights or DRLs even on topspec models. The new K10's side profile looks proportionate with the sloping roofline. The 13-inch wheels look small and Maruti could have gone with 14-inch rims. The rear looks very similar to the Celerio but the taillamps have got a makeover. The overall car design is curvy with simple surfaces compared to the old version which had sharp edges.

The interiors of the new K10 have seen a dramatic transformation as well. The dashboard is new and the design helps to increase the legroom. The new Alto K10 comes with many modern features. The first thing that will take your attention is the 7-inch smart touchscreen infotainment. It comes equipped with Android Auto and Apple CarPlay, in addition to a few SmartPlay Studio apps. The display is fairly bright and easy to use while its touch capacity is quite responsive.



Interior is okay. Top-end model gets a 7-inch touch screen and steering wheel control



Digital instrument cluster. No tachometer.



Rear seat comfort for 3 passengers is difficult





The speedometer is carried from the S-Presso, which is digital encompassing a small MID cluster. The steering wheel in the new K10 looks better due to the contrasting faux brushed aluminium arms along with the few steeringmounted controls for audio, MID info, voice commands and phone controls. The test mule that was given to us was the top trim VXi+ that is equipped with front power windows, but the switches are placed on the centre console below the touchscreen like the S-Presso.

In terms of storage spaces, the centre console has a pair of cup holders and two small cubby holes, and the front door pockets are generous for one-litre bottles but rear passengers don't get that. The seat fabric and trim are nice and the quality of materials and fit and finish are honestly above expectations. The rear space in the new K10 did surprise us with the amount of legroom and headroom on offer. Due to the increase in dimension, all the seats are comfortable, and the underthigh support and knee room are good for a small car. This has also helped to increase the boot capacity to 214 litres, which is the largest in this segment.

The visibility is good for the driver and due to the thin A-pillar, the blindspot is also reduced. If there's one thing the Alto excelled at, it was ease of driving. That continues on the new Maruti Alto K10 as well. Powering the new K10 is the proven 998cc K10C petrol engine with dual-jet technology, which we have already seen in the S-Presso, WagonR and the Celerio. This new generation of the one-litre, 3-cylinder petrol engine is more refined and gets dual-jet injection and dual VVT (variable valve timing) making it inherently more capable than the previous generation. For the first time, the Alto is available with both a 5-speed manual transmission and a 5-speed AGS (automated

gear shift).

In terms of driving, I love the way the new Maruti Alto K10 handles though. Here the lack of weight comes in handy. It loves to be chucked into corners and one can do it with confidence, aggression and total abandon. It is a proper entertainer on tight twisties. You can also get it to correct its line mid-corner, which for a car meant to deliver 'kmpl' over everything else, is a huge plus. The new Alto K10 is peppy with the little engine being energetic and rev-happy. But like many small engines, it too is a bit vocal, especially when revved hard.

You won't have reason to complain about the 5-speed manual gearbox either. It's light and the clutch is easy to modulate. Also, the automatic gearbox is easily among the best of the type. Gearshifts are largely smooth and it is mapped to deliver higher fuel efficiency. A tight turning radius





and light steering make the Alto K10 really easy to punt around town. Low-speed bump absorption is also very good. There is firmness to the suspension that becomes more pronounced at higher speeds. High-speed stability is fair but up-down movements are a part of the experience. I found the braking to be really impressive and it's remarkable how stable the Alto K10 is even when you

brake really hard or come to an emergency halt.

The name Alto recons due to its pleasant looks, simple mechanicals, bulletproof reliability and the ability to deliver consistently high fuel economy. Now in the new K10 avatar, Maruti has further refined this package. It is smarter looking, has more features on the inside and has better ergonomics.

Maruti Suzuki has also put a lot of emphasis on safety. As mentioned before the new Alto K10 is built on the Heartest platform, which meets all the latest Indian crash safety regulations and comes equipped with standard dual front airbags, an antilocking braking system (ABS) with electronic brakeforce distribution (EBD), rear parking sensors, front seat belt pre-tensioner with force limiter, reverse parking sensor and high-speed alert.

According to Maruti, the manual returns 24.39 kmpl and the automatic delivers 24.90 kmpl. The new Maruti Suzuki Alto K10 starts at INR 3.99 lakh for the standard and goes up to INR 5.83 lakh for the VXi+ AGS gearbox version. The new K10 is easy to drive and spacious, and that tag of India's most fuel-efficient car is sure to be a pull in its own right. Like the old model, Alto K10 will remain a level-headed choice for a city car.





Walkaroo International Pvt. Ltd. Malumichampatti, Coimbatore-641050. \*MRP (inclusive of all taxes) mentioned is price per pair, Kids (08X10 | 11X13). Phone:1800-572-2999, E mail:contact@walkaroo.in

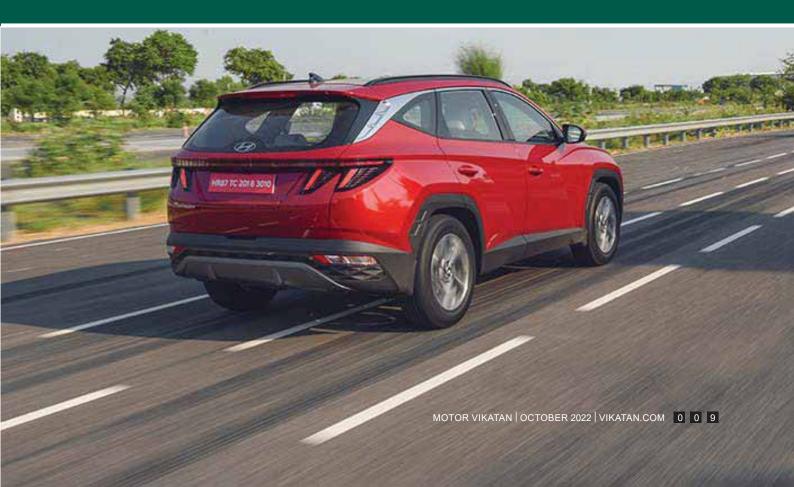
## HYUNDA TUGSON ADVENTURE WITH STYLE & LUXURY





Most of the top-selling cars go for a revamp once in two years. Hyundai, the Korean automaker goes the extra mile and makes a complete changeover. Recently we saw the premium hatchback i20 in a new avatar. Now, for 2022, it's Tucson's turn. Hyundai Tucson takes the greatest hit design elements of pretty much everything else on the market and brings them into one package. The new Tuscon sports a daring new design that seems destined to shake up the premium-SUV marketplace. This new Sensuous Sportiness design language will gradually be seen on other cars in Hyundai's portfolio.

Now in its fourth generation, the Tucson is redesigned from stem to stern by incorporating the company's new design language for a bold look. In terms of the dimensions, Tucson has grown significantly. At 4,630mm





10.25 inch touchscreen is awesome



The 2.0-litre diesel that produces 186PS power.



Diesel with all wheel drive mode. 8 speed gearbox...



The rear seat has recline adjustment and offers decent space

long, 150mm longer than the previous gen. It also sees an 85mm increase in wheelbase at 2,755mm, just short of something like the 7-seater Skoda Kodiaq's 2,791mm. This adds up to an 80mm increase in rear legroom, and 56 litres of added boot capacity for a total of 540 litres.

The 2022 edition is different with its distinctive cascading headlight design, squared wheel arches and bold creases on the bodywork. Its grille is particularly striking because not only does it cover practically the entire nose, lighting elements are incorporated into its structure, giving the Tucson the look of a concept car. When turned off, they look just like facets of the grille. The headlights are positioned lower down and act as both headlamps and fog lamps.

Once you move to the sides, squared wheel arches and bold creases are visible. The roof pillars are all black but a silver accent arcs from the base of the windscreen to the tailgate in an elegant curve. The rear looks completely new as you can see the rear wiper is concealed behind the roof-mounted spoiler, while the Hyundai logo is integrated within the rear windscreen itself. The rear lights seem to be a combination of the straked elements and a thin full-width bar. The mesh theme from the front grille is reflected in the back bumper, above a silver skid plate that continues the sharp-edged design language of the bodywork.

The 2022 Hyundai Tucson's interior impresses on all accounts. The design is stylish, the material quality is excellent, and the infotainment system is mostly user-friendly. The control switches and all the buttons are easy to access with a well-damped action. It's nicer overall than the mere competitors, which have more hard plastics throughout. There's plenty of space to go around as well, both for passengers and cargo. It feels a lot nicer and posher than the old car, largely thanks to an abundance of softtouch and good-quality materials throughout. It's easy to find a comfy seating position, too, thanks to plenty of adjustment in both the seat and steering wheel. The silver trim accentuates the top of the dash and flows onto the doors, accentuating the SUV's width and sense of space.



The front seats offer plenty of room and feature plush and supportive cushions covered in nice material. For drivers, it's easy to find a comfortable and commanding position, plus a large windscreen and thin pillars allow for great visibility. The rear seat, with all that added legroom and a huge degree of adjustment for the recline of the seatback. The cabin offers decent-sized spaces throughout to hold your small items. The cupholders can hold larger water bottles.

Meanwhile, the lack of any instrument cowling also opens up the view ahead for an airy feeling, with the driver's display sitting like a tablet suspended behind the

steering wheel. Standard on all versions of the Hyundai Tucson is a digital driver's display that replaces dials and gauges with a crisp screen. It looks great, and there are plenty of customisation options as well. Smack in the middle of the centre console is a new infotainment system, displayed on a 10.25-inch touchscreen that has crisp graphics, Apple CarPlay, and Android Auto connects with Hyundai's Bluelink app, enabling owners to keep tabs on their car remotely, via their smartphone.

The new Tucson also comes with the Level 2 ADAS, which we are seeing for the first time from Hyundai. There are in total 19 ADAS features and the main being the system judges the distance to cars in front accurately, isn't overly eager to brake or accelerate back up to speed, and the whole thing just feels intuitive and seamless.





Adaptive cruise control and lane keep assisting, work well together to keep the Tucson tracking straight, making small adjustments. As the name says Advanced Driver Assistance Systems, helps drivers during long trips especially while taking a sip of water or small distractions.

In terms of powertrain, the new Tucson continues to be offered with a 2.0-litre naturally aspirated petrol engine paired with a 6-speed automatic gearbox and 2.0-litre turbo-diesel that comes with the 8-speed automatic transmission. The acceleration in the 156PS petrol engine is smooth and linear and it feels at ease driving in the city. It comes with a 6-speed AT which offers smooth shifts, though it feels lazy to downshift at times. Also, the engine feels more at ease while cruising, but lacks the outright punch for quick overtakes.

The 2.0-litre diesel, that produces 186PS is mated to an 8-speed automatic, feels punchy and offers good acceleration

for overtakes. The new Smart drive mode picks from throttle/ steering settings of Eco/ Normal/ Sport depending on the situation automatically. There is no manual but the diesel gets an AWD system with terrain modes (Snow/ Mud/ Sand). Now though, the Tucson AWD also gets terrain modes to make the best use of Hyundai's HTRAC all-wheel drive. It uses a centre clutch to send torque (up to 50 per cent) to the rear wheels when needed and seems capable enough, but more offroad oriented testing is required here. The 4WD lock feature to send power to all four wheels up to certain speeds continues. However, you do miss paddle shifters with both engines for a sportier feel.

Tucson's talented chassis, with impressive steering, feel for an SUV, nimble handling and good body control. It surprises with neat and controlled body movements. There is roll and lean, yes, but it's managed well and at less than allout speeds it stays fairly level in the

cabin. That should give you a hint of how the suspension is set up. The SUV manages to flatten out most undulations on the road and does not lose its composure even with bigger bumps, keeping you away from harshness. While it does bottom out at times over potholes, the impact is well-padded.

In terms of the features list, Hyundai cars are naturally stuffed with equipment. You get the basics of the segment being a massive panoramic sunroof, dual-zone climate control, connected car tech and more. But then there are dual powered seats with heating and cooling on offer, 64 colours ambient lighting, a multi-air mode which means airflow is from multiple vents, an 8-speaker BOSE audio system, sounds of nature feature which plays soothing music, Alexa/ Google Voice assistant, OTA updates, multi-language for the infotainment system and more.

The previous gen Tucson was certainly handsome, but the new one impresses by pushing SUV styling forwards and delivering an upmarket interior for a mainstream model. Both engines offer refined driving manners and plenty of space for families. However, it's no longer a budget option, as prices have crept up along with its desirability since it is CKD and not made locally. The Hyundai Tucson is available in two variants. The petrol Platinum variant is priced at Rs 27.69 lakh and the Signature variant costs Rs 30.17 lakh. The Diesel Platinum variant costs Rs 30.19 lakh and the Signature is priced at Rs 32.87 lakh. The diesel Signature AWD is priced at Rs 34.39 lakh (all prices exshowroom).



Powerful 350cc Engine | Honda Selectable Torque Control (HSTC) Honda Smartphone Voice Control system (HSVCS) | Assist And Slipper Clutch





aruti Suzuki, India's favourite car maker is a leader in many segments. Now, to dominate the mid-size SUV segment, it is ready to launch its new Grand Vitara. The Grand Vitara is built on Suzuki's Global-C platform, which also underpins the current Vitara Brezza, Ciaz and S-Cross, as well as the newly introduced international S-Cross. Maruti Suzuki has taken it a step further and spiced it up to suit Indian tastes.

Unlike the badge-engineered cars like Baleno, Glanza and Vitara Brezza and Urban Cruiser, the midsize SUV is co-developed by Toyota and Maruti Suzuki. The Toyota's version Hyryder and Grand Vitara share the same platform and are powered by Suzuki's Dual-Jet K15C series engine and come with a strong hybrid option that is sourced from Toyota. The nameplate Grand Vitara makes a comeback after almost a decade and puts an end to all speculations. To drive the new Grand Vitara we headed towards the lake city 'Udaipur' and we experienced every single drivetrain option of the Grand Vitara.

The Grand Vitara is longer and wider than the Brezza and also features a wheelbase increase of 100mm, taking the wheelbase to 2,600mm. This means that it will feature an increased interior room. In terms of looks, the Grand Vitara gets a bold and trendy design. The front nose's frame is chrome which is complemented with a contrasting black front grille and silver skid plate. The DRL occupies the



# HYBRIDSININDIA







top of the bumper and the headlights are moved downwards, thus eliminating the fog lamps. The large grille sits in-between the headlamps upfront and body cladding, for a beefed-up look.

The side profile shows off a longish frontal overhang that mixes the balance. The 17-inch wheels look quite handsome and they fill up the wheel arches well. While the shape of the wheel arches and the 2,600-millimeter wheelbase is similar to the international model. The bodywork designed in India for the Grand Vitara not only lends it to a more SUV-like form but also gives it marginally larger dimensions. So that makes the Suzuki Grand Vitara and its platform sibling Toyota Hyryder, two of the largest cars in the segment now.

At the rear, the sleek streak of taillights echoes a few premium cars and that is coupled with the tastefully done Grand Vitara badge making the tail more premium. The imposing front and rear design, the wide stance with the 17-inch wheels, and particularly the wide fender and bumper design makes the Grand Vitara look impressive.

The cabin looks familiar with Maruti Suzuki elements like the switches and steering wheel. The top section of the multilayer dashboard



uses hard plastic, while the middle section is a leather finish panel with metal finish accents. The Smart Hybrid sports dual black-Bordeaux interiors with silver finish accents, while the strong hybrid has an all-black cabin with champagne gold accents and diamond stitch leatherette seat covers. The seating posture feels like an SUV but the side thigh support could have been much bigger as it is small even for an average person. The ingress and egress are easy, both for kids as well as for older passengers.

The rear seats are comfortable and upright, even in their slightly more reclined position. But comfort wise I don't see any problems. In terms of the rear, headroom is a concern, even for an averageheight person, it might feel a bit shorter, especially if you get the top variant, which has a big panoramic sunroof and its liner sits lower.

The nine-inch audio system gets wireless Apple CarPlay and Android Auto capabilities. The overall infotainment feels high quality and do so the buttons and controls on the dash. For the first time, Maruti is offering a big panoramic sunroof, which elevates the overall experience. The sunroof cloth could have been of better quality and it feels like it's going to start sagging in a few months. The top end gets a fully digital instrument cluster and a heads-up display too. Grand Vitara also gets the front ventilated seats but it is quite noisy and could have been more powerful. It also comes with a 360-degree camera, which is great news.

The bigger concern is the boot space which has only 373 litres for the mild hybrid variants, which is comparable to sub-four-meter crossovers. In the strong hybrid variant, it's just 265 litres, which is lesser than a Baleno. This is mainly because, in most of the ICE-derived hybrids, the battery pack sits behind the rear seat,

eating into the boot's space. In the strong hybrid, even the spare wheel is placed beneath the car while in the smart hybrid it goes inside the boot.

In terms of the powertrain, there are quite a few configurations on offer everything from a naturally aspirated engine, two-wheel drive configurations, all-wheel drive, mild hybrid and strong hybrid, except diesel. The new Grand Vitara will be available in two 1.5-litre engines, and multiple transmission options and it will be the first vehicle in its category that will be equipped with an all-wheel-drive system and a full hybrid technology.

Let's start with the strong hybrid, which Maruti Suzuki calls an Intelligent Electric Hybrid, which is something we are experiencing for the first time. The strong hybrid variant comes with the Toyotasourced 92hp, 1.5-litre, threecylinder Atkinson cycle petrol engine paired with an electric







motor that makes 79hp and 141Nm of torque. Combined, the hybrid powertrain makes 115hp and is paired to an e-CVT gearbox. Maruti claims an efficiency of 27.97kpl for this powertrain. This is combined with a small motor that acts as the starter motor and also the generator, along with a larger motor that provides drive to supplement the engine with torque.

The engine start/stop button is blue in colour and starts silently, if the battery has enough charge, you can set it off completely on electric energy. It switches to EV mode at lower speeds and feels futuristic when being driven like this. Maruti Suzuki says it can be driven in EV mode 30-40 per cent of the time, which is a fair amount. This system is intelligent. It complements each other to ensure that whether you are driving in the city or on the highway, or even driving around the terrains, it will ensure that with the battery power and with the engine power, there's always a seamless supply of power.

Though on paper, the total output is 115bhp and feels underpowered, the driving experience and the performance are quite impressive. The EV mode is very cool — if the battery has enough charge, you can set it off completely on electric energy only. There's an EV mode button to lock you in there for as long as possible too. In this mode, it is silent and rolls along comfortably.

The engine is mated to an eCVT and based on the throttle input, it automatically and seamlessly changes drive modes from



electric to hybrid and only the petrol engine. It also is equipped with a regenerative braking system which helps in charging the battery. It also comes with three driving modes — Sport, Normal and Eco. The sport does feel a bit more spirited but there's marginal difference between the latter two modes.

If you wanted to enjoy this car you have to drive it in a very calm and composed manner. This means you have to drive this car at 2000 to 3000 RPM both in the city and on the highway. And these figures are both manual, as well as automatic. During overtakes in a city or on the highway, you often need to downshift more. If you're travelling with five people, the sixspeed torque converter automatic does its job quite well. But it isn't the quickest of gearboxes and often makes a downshift only after the engine falls out of the power band. The paddle shifters certainly help.

The ride quality is impressive with the kind of supple ride that this car offers. It's perfectly equipped for Indian road conditions. In terms of handling, however, as long as you are gentle with the car, you enter the curve smoothly, you're gentle on the suspension everything will be fine. If you are harsh, if you're just throwing the car around, if you're too harsh into the corners, that is where you will feel a fair bit of vertical movement from this car. It's not exactly a sporty, dynamic car when it comes to driving around twists, be gentle with it, be laid back with it. If you are looking for the best ride quality, and smoothness on the bad roads, go for the Grand Vitara.

We also performed a bit of off-

The Maruti Suzuki **Grand Vitara and Toyota Hyryder** will be pitched directly against a competitive crop of midsize SUVs such as Hyundai Creta, Kia Seltos, MG Astor, VW Taigun and Skoda Kushaq.







roading on the Grand Vitara with the AWD option, which features the K15C engine along with a mild hybrid system that is paired with a 5-speed manual transmission. The AWD only sends power to the rear wheels when it detects slip at the front wheels. And if you know how to use it wisely, you can use it to take the Grand Vitara on some pretty rough stuff. We drove this car through a tailor-made offroad section, where it easily travels through some slush, inclines and

hill hold function. Crawl down with the hill descent control at a preset of fixed 10 kilometres an hour showed off its capabilities through the trenches. In the 25-degree approach or departure angle, the Grand Vitara tackled with ease.

The strong hybrid system uses a small 0.76kWh lithium-ion battery, which is lighter and can push out more instantaneous power. The small batteries also mean that the strong hybrid is only about 80 to 85 kilos heavier than the mild

hybrid two-wheel drive variants. The braking felt consistent and predictable across all the variants and the strong hybrid also gets a dedicated B mode for stronger braking assistance. Though the strong hybrid belongs to Toyota, all the tuning for the mild hybrid, strong hybrid and even the suspension and brakes is completely done by Maruti Suzuki and Toyota's job here is to simply manufacture both the Grand Vitara and the Toyota Hyryder at its plant near Bangalore.

Grand Vitara has a long feature list too, which includes a 360-degree camera, wireless charger, ambient lighting, connected car tech, ESP, hill-hold assist, tyre pressure monitoring system, and six airbags. The Maruti Suzuki Grand Vitara and Toyota Hyryder will be pitched directly against a competitive crop of midsize SUVs such as Hyundai Creta, Kia Seltos, MG Astor, VW Taigun and Skoda Kushaq. The price of Grand Vitara ranges from Rs 10.45 lakh-19.65 lakh (ex-showroom, Delhi). The strong hybrid variants cost Rs 50,000 more than the Hyryder's. This is because each brand has taken a price advantage of its tech.

I feel with all the powertrain options on offer and while neither of them feels enthusiastic, they all feel adequate, refined and aptly tuned for Indian driving conditions. The strong hybrid makes a strong case for itself. If you are going for a strong hybrid version, Hyryder makes sense and if you want a sportier look and wider service network Grand Vitara is the option to go.





### SCAN QR CODE TO FIND US ON SOCIAL MEDIA









CALL: 94999 94888, 85999 85999, 044 42500500

OMR: Kalaignar Karunanidhi Salai, ECR Link Road, Sholinganallur, Chennai - 600 119. Mount Road: No 7, Pattullos Road, Mount Road, Chennai 600 002 (Near Express Avenue Mall), boomcarschennai@gmail.com, www.boomcars.in

0 2 2

ndia loves SUVs. And this love will further continue due to the new products that are launched recently. Given the advantages SUVs have in poor Indian driving conditions, this paradigm shift is well justified. Sensing the market 20 years ago, Indian auto major Mahindra & Mahindra (M&M) developed and launched its SUV, Scorpio. This SUV, when launched in 2002, completely transformed the face of M&M and has gone on to become a household name across the country. And with sales still going strong, the Scorpio continues to be at the core of M&M's universe. A series of updates over the years has improved the product considerably, but now 20 years on, M&M has given the Scorpio its biggest revamp, which is largely new. But just how much better is it? Let's find out what is new in the third-generation Scorpio N.

When Mahindra showcased this product, they called it the big daddy of SUVs. The reason behind this is that the engineers at M&M took the third-generation ladder frame of the outgoing

Scorpio and worked on it to accommodate the larger structure with a longer wheelbase, wider and taller compared to all the SUVs that are available in the market. M&M has completely overhauled the Scorpio and modernised it in all aspects. If you look at the Scorpio N, you can immediately say it has a charismatic and macho personality. The silhouette of the bonnet is typical Scorpio and the face is the tallest and widest in the class. The wide stance of the car is evident with the help of a wide rectangular three-dimensional





grille followed by the slimmer full-LED headlamps. The front bumper houses LED DRLs and fog lamps.

The side profile has distinctive design elements like a chrome strip running along the bottom of the window line to the top of the rear glass, which looks like a telson of a scorpion. Like in the XUV700, the swollen wheel arches and the kink above the rear wheel are very evident in the Scorpio N as well. The 18-inch 255/60 tyres looks rugged and sporty. The rear of the Scorpio N has few elements, such as a black panel between the tailgate and the rear window. By looks, the rear looks flat and too plain. The tall 'stacked' tail lamps are inspired by Volvo's SUVs.

Once you enter the cabin, you won't think it is an Indian car. It is very premium due to the chocolate brown colour plastic trim, which also has a nice fit and finish. The trim colour is well complemented by the brown leather seats which offer outstanding comfort for all the passengers. From the previous generation, Mahindra has retained the tall driving position and commanding view in the Scorpio N as well. In the rear, you get a choice to choose either captain or a bench seat. Both offer good cushioning but captain seats offer more comforts. Apart from their ability to recline, they also provide better access to the third row, whether by an easy fold and tumble, or simply walking between them. Like in most cars, the bench seat has a 60:40 split.

The middle row offers tremendous knee and headroom, with enough width for three on the bench. The middle row passengers also get a pair of AC vents with blower control, as well as two USB-C ports. Till the previous generation, Scorpio's third row featured side-facing seats but the Scorpio N now gets front-facing seats as standard. The headroom and shoulder room are sufficient in the third row but the knee room is too tight. The third row is basically for kids since there are no AC vents, cupholders and mobile charging points.

This new Scorpio-N packs all the latest features that one expects. Mahindra's Adreno X that apart from a mobile app, is also accessed through the 8-inch infotainment system complete with wireless Android Auto and Apple CarPlay and a plethora of driving data is displayed using a 7-inch instrument cluster including driver attention detection. There is also a connected car tech too, including

remote functions, location services, an SOS function and even Amazon Alexa commands. The 12-speaker Sony audio system is lifted from the XUV700, which offers excellent audio output. In terms of storage, it is decent with two large cupholders and large door pockets.

The Scorpio N gets Mahindra turbo-petrol (mStallion) and turbo-diesel (mHawk) engines. The 2.0-litre turbo-petrol produces 203hp and 380Nm, while the 2.2-litre diesel makes 175hp and 400Nm of torque. It is mated to a 6-speed automatic gearbox but is also available with a 6-speed manual. In its highest trim, you can also opt for a 4-wheel drive variant of the Mahindra Scorpio N. Either a 6-speed automatic or manual transmission, both of which shift smoothly and seamlessly. The diesel engine is punchy, has a superb mid-range and feels more practical with better fuel economy and load-bearing capacity. Power delivery is linear and predictable in both the diesel and petrol mills while both have enough grunt and refinement to not be able to tell them apart. These excellent engines are what rounds up the Scorpio-N as a complete package.

The chassis and body structure is stiffer too thanks to the use of more high- and ultra-high-strength steel. The rigidity of the body has improved and an increase in stiffness reduces the body roll. Mahindra has extensively worked on the suspension package concentrating on the damping ability and performance at various frequencies of vibrations. Scorpio uses the Frequency Dependent Damping (FDD/FSD), which I think is one of the best configurations for Indian road conditions. The

rear suspension uses a multi-link setup including a Watt's Link. The steering dynamics feel incredibly light, which makes it a boon in bumper-to-bumper city traffic, but on the highway, you would want the steering to stiffen up slightly to give you more confidence. Considering the body-on-frame construction and tall in nature, the SUV possess a body roll, but it's far better contained and gives you the confidence to go around corners faster than in the old Scorpio.

In the terrains, the 4x4 variant showed its potential. The fourwheel-drive can be selected from two buttons on the centre console with a terrain management system that then decided the appropriate throttle response. All these combined with easy steering means that the Scorpio doesn't at any time need any muscling around. It is simply very easy to drive everywhere with the steering weight calibrated well for all kinds of usage. With the advanced 4x4 system the Scorpio N also adds four terrain modes (Zip, Zap and Zoom, which translate to Eco, Normal and Sport) that will not only alter the traction control and



other electronics but the behaviour of the 4x4 system as well. To that effect, it has a lockable differential too. The braking is quite impressive even under hard braking and midturn braking doesn't upset the car much.

Notable features in Scorpio N are a wireless charger, a sunroof, dual-zone climate control, auto headlamps and wipers, powered adjustment for the driver's seat, engine stop/start, keyless entry and go, drive modes in the diesel versions, and off-road drive modes in the 4WD versions. The Scorpio N gets front and rear parking sensors but doesn't get the full 360-degree system, and front and rear cameras. The top-end models will get you six airbags, all-four disc brakes, ESC and multi-mode

traction control.

The Scorpio is one of the most successful Mahindra models ever and has the potential to do well with the Scorpio N. the new Mahindra Scorpio offers a raft of improvements - especially in areas where it was clearly lacking vis-àvis the competition. As a result, it features better quality levels and improved fit-and-finish, as well as increased levels of standard equipment and decidedly better ride and handling. For people looking for a tough, sturdy, bodyon-frame SUV, the new Mahindra Scorpio N could prove to be a very attractive proposition. With no direct competition, Scorpio is all set to continue dominating the market and Mahindra has got a clear winner but Mahindra has to really focus on its capacity and try to reduce the waiting period to keep the customers happier. M





Ris the most spy-shot bike among our Motor Vikatan readers. Since then, there has been a lot of anticipation for this bike! The reason is just because it is a Royal Enfield! That's it.

Everyone is familiar with RE's famous J Platform in India. Royal Enfield introduced it two years ago. On that platform, the Classic 350 Bullet and Meteor 350 were modernised. It was well received by the audience. Let's see how the

Hunter is easy to ride and stylish to look at!

### **Design: Retro and Metro?**

Hunter, a typical modern retro bike. Being a Royal Enfield, it has also got Bullet status. Many refer



to this as a 'Hunter got a Bullet'. Its circular headlight is the source of this retro! A special feature of this petrol tank is that it has a teardrop design. With small panels on the sides.

Looking at its overall silhouette, one would think of it is a scrambler. It has some ergonomic designs that are not found in any other RE Bullet bikes. The recesses for the knees are different. Also, those side panels are new. Like the Meteor, Royal Enfield has sprinkled a lot of accessories on it. Its flat seat design makes it comfortable to sit and ride. The pillion rider is also seated comfortably.

Judging by its dimensions, it is









smaller than most Bullets. However, it is a 181 kg bike. Bullet riders can easily handle this.

Undermining this giant are its tiny 17-inch wheels. It's too small for this bike! But Hunter plays in style. Try a colour scheme called Dapper Ash. It will be nice. Some of the bold lettering on the top-end Metro model will be eye-catching. The lower-end Retro model has a neat and clean paint scheme. Its dual glass dials also look good in retro style.

### **Full of Features?**

This is not to say that it is a bike without features; they did not skimp on the features. It has an elongated designed USB charging port. Trip navigation on this display is optional.

Hazard lights have been given in the top-end Metro variant. Otherwise, no LED. Both models are powered by halogen bulbs. But, as far as we know, halogen bulbs are brighter than a LED lighting setup! So, don't worry! The alloy wheels are quite stylish on the Metro. It has dual channel ABS. Tubeless tyres are only available on Metro.

Standard spoke wheels are used on the low-end Hunter; Slim tyres; rear wheel gets drum brakes; Single channel ABS, basic instrument console, tubular rear grab handle, halogen brake lamp, old style rectangular indicators – all these are basic features. But retro is practical and stretchy.

### **Engine Performance**

This Hunter can't be called sporty by itself. It has the same engine setup as the Meteor 350 and Classic. The technical specs like 20.2bhp power and 27 Nm torque remain meteoric and classy. However, Royal Enfield says that the Hunter has been slightly re-mapped to suit its size and shape. Royal Enfield did this even when the Classic and Meteor was introduced. It's also a workout. Both had very low vibrations compared to the old Bullets! And so it is with this Hunter; not much vibration is felt. Its engine response is high. The peppy sound from its short exhaust is good, with a sporty bit. But a musthave for Bullet lovers! I like the beat of it.

The Hunter offers the same performance experience as other RE bikes. Royal Enfield says its mileage is 36 kmpl like other bikes.

When riding it on the highways, the Hunter is quite fun till 80 – 85 kmph. Up to 100 can go comfortably



without any irritation. The engine remains smooth, though it stutters a little at 120 kmph. Well, basically no vibrations. Hunter couldn't be throttled beyond 120 kmph.

Like the Classic and Meteor, the Hunter sets the bar when it comes to solid low and midrange. People still expect top speed! Also, its clutch seems to be a bit of a villain for city riding. Could have been a bit lightweight.

### How about ride and handling?

Its easy handling is primarily due to its seat height. 790 mm is the seat height. At the same time, its narrow petrol tank and riding position are superbly designed so that even 6 feet tall people won't knock their knees on the handle.

Its weight is 181 kg. It is 14 kg lighter than the Classic 350. Oh, and the retro variant is even lighter. It weighs 178 kg. This weight gain could be due to the centre stand and dual channel ABS on the Metro variant.

So, those who are used to riding the Bullet will find it easy to handle. Royal Enfield has also done a good job on its chassis. What's more, despite the small 17-inch wheels, the Hunter is quite agile to ride. Another reason is that it also has a 20 mm wheelbase that is shorter than the Classic. Also, the RE has sharpened its steering rack angle to 25 degrees. When riding in the city, the Hunter 350 makes us active.

Although the Meteor shares the same platform and front chassis as the Classic, the rear chassis is slightly changed by Royal Enfield. They have made the rear frame a bit smaller and it gets a new subframe. The Meteor and Classic's foot pegs are a little heavier. Not so with this Hunter. Less weight. Instead of forward, in a cruiser position. So, long riding can be fun. As I rode it, I remembered the Interceptor. The reason is that its riding and footpeg position was the same. A lot of people will definitely like it.

Because of this, what it feels like riding a 250cc naked bike... that's how I felt riding this, Hunter. Only the rear suspension seems stiff. But this is not a big drawback. Its low ground clearance shouldn't be a big minus for the Hunter. Just 150 mm. Good thing we didn't hit any speed breakers when we rode it though!

### Should I buy a Hunter?

Absolutely! It comes in two variants Retro and Metro. Retro is the cheapest variant. Its on-road price is 1.74 lakh. 1.94 lakh for the top-end Metro. If you choose the mono-tone option on this one, the price will come down. It is priced at par with the TVS Ronin. That means you can buy a 350cc Royal Enfield for the same price as a 225cc. Also, the fact that it costs thousands less than Honda's CB350RS is a plus. Not much top speed; a little heavy clutch in the city; aside from slightly stiff rear suspension, this agile Hunter is sure to hunt a lot of customers.







hen we talk about commuting and Honda in India, the Activa is the first thing which comes to mind. But that is not the case, Honda has showrooms for their small capacity vehicles and Honda Big Wing for the large capacity motorcycles. The Honda H'ness was the first sub-500 cc motorcycle in the Big Wing showroom. Now this has been followed up with the CB300F.

The CB300F is very much India focussed. It sports a 293.52 cc engine which puts out a relatively low 24.1 bhp and 25.6 Nm of torque.

While the bike has some elements of aggression in its styling, it does look like a Hornet at a quick glance. It is easy for a passer-by to mistake this as a smaller capacity motorcycle. That being said, the bike does get sharp styling from the headlight to the body panel. To add to its visual appeal, you also have golden USD forks, a wide handlebar which offers plenty of leverage, a large sculpted fuel tank and most importantly a wide and comfortable saddle. The company states, that this design is inspired by its bigger siblings in the Honda stable. While a hint of that is visible, one cannot get carried away with that visual imagination!

The tank shrouds and split saddles give the CB300F a nice sporty character. A number of parts are painted matt black, which helps the other elements of the motorcycle stand out even more. We like that treatment. All the lights on this motorcycle are LED, which is somewhat expected at this price point. You also get a fully digital LCD instrument cluster with mileage indicator and Bluetooth connectivity.

This bike is great for riders who aren't very tall. The saddle height is just 789 mm, making it easy for most riders to flat foot it. And with a kerb weight of 153 kg, flicking it through traffic is a breeze. The reduced weight also aids the power-to-weight ratio, making those low power numbers on paper feel better in practice. A 14-litre fuel tank means you get a tank range more than sufficient for snaking













around the city roads. 177 mm of ground clearance is enough for all urban uses and unless the city you live in has moon-sized craters disguised as potholes, you should be safe! The chunky radial tyres on this bike give excellent straight-line handling, but needs an extra push to tip it into the corners.

The Honda CB300F gets dual-channel ABS, Traction Control and a slipper clutch. These are excellent safety features for this motorcycle which will be useful to the user in real world conditions.

The 6-speed gearbox is decently smooth, and is mated to a light clutch. Which is wonderful for navigating through the urban sprawl. And while downshifting quickly through the gears, the slipper clutch smoothens out all the rider's incorrect inputs.

This Honda is underpowered in comparison to the KTM Duke 250 and the Suzuki Gixxer 250, which will surely be a point to be considered by prospective buyers. The bike is pretty smooth all the way till you hit a ton on the speedometer. Post that there are negligible vibrations to be experienced in the handlebar and foot pegs. It is not excessive to spoil the ride experience, but it is noticeable.

Acceleration from standstill and slow speeds is great thanks to its low weight. Cruising at speeds above 125 kmph on empty highways was also not a problem. The riding ergonomics are spot-on for city riding. It is not too upright, neither is it too sport, finding a gentle balance between the two.

If you do want to get sporty, Honda has given you the option of switching off the Traction Control. And honestly with those power figures, the bike is easily rideable with just the control of the wrist, with minimal electronic interferences. This interference of the Traction Control is most noticeable when you are accelerating hard from standstill. The bike moves faster when you only use your right hand to control the fun!

All the switchgear on the motorcycle is top notch, and leaves nothing to complain about. The fit and feel of the motorcycle gives you a premium feel rather than a commuterish feeling.

It is a sweet handling bike as you would expect from a Honda. The bike feels neutral and planted. For some riders it might feel 'boring', but it is just because the bike is so good. Suspension on the motorcycle is tuned for handling bad surfaces which we get in our cities. This does get in the way a bit, when you want to enjoy some spirited corner carving.

To put things in perspective, the new 2022 Honda CB300F has the same power figures as the CBR250 back in 2011! It isn't quite the 'Formidable Streetfighter' as advertised; it is closer to a lovely large capacity commuter. Which isn't a bad thing at all!

The Honda CB300F is available in two variants, Deluxe and Deluxe Pro. The only difference between the two is the availability of Bluetooth or not! The former is priced at INR 2,25,000 ex-showroom, while the latter is priced at INR 2,28,000 ex-showroom. A little pricey, but it would make you a happy city slicker for many years without worry!





### TVS RONIN A NEW INTERPRETATION

hatever TVS does, it does it smartly. Be it a facelift of old bikes; be it the launch of new bikes; or be it the introduction of new technologies. Everything is a step up! TVS has once again done a spectacular launch and the name is Ronin.

TVS has bikes and scooters for commuting; for sporty lovers, there are bikes like Apache. The TVS lacked a cruiser bike for long-distance riders. Now TVS has brought that too. That's Ronin. Its brilliance lies in bringing it closer to a quarter-litre engine. If you want to compete with cruisers like the Yezdi Scrambler, Honda H'ness, Royal Enfield Meteor, it's okay to have a little less power. TVS has come up with the Ronin to appeal to the masses with style and price.

We went all the way to Goa to test-ride the new 225cc bike from TVS Ronin.

### How is Ronin?

### **Design**

4 years ago at the Auto Expo, in Delhi, they had a bike named Zeppelin on display at the TVS stall. That Zeppelin is now launched as Ronin. There are many changes in the design, though all the styling stuff for a cruiser is there. Starting with the seating position, foot pegs and handle bar, it is all visible. I really liked the headlight. Retro-styled circular headlight, and a T-shaped DRL is awesome. This is innovative. The upside-down forks shining in gold. It's a sight to behold. It is also stylish. Its size is 41 mm. Its handlebar is called a swept-back bar. This is ideal for long-distance cruising. It has a 14-litre tank capacity. The grip is good for the thighs. The design of these alloy wheels reminded me of Harley Davidson cruiser bikes.

Its single-dial instrument cluster has a semi-retro design. It is inspired by the Ducati Scrambler. The rear grab rail was rather mundane. But if you don't like it, you can remove it. This LED tail light is awesome.





Asymmetric dial, perhaps a Ducati inspiration?



Single Channel ABS; & Dual Channel ABS



It is a connected bike. The quality of the switches is superb.



The design of the alloy wheels is reminiscent of Harley Davidson.

It's great that it's integrated into the rear subframe. Mirrors are nice and smart looking. Its arrowshaped LED indicators give it a premium feel. For the money we pay, the fit and finish and quality of this bike is excellent.

Overall, the Ronin shines as a superb cruiser with a neo-retro modern style.

### **Engine Performance...**

How about in the city... how about on the highways?

It has a 225cc engine. When we saw the 2018 concept, the Zeppelin, it had a hybrid powertrain. Perhaps, I thought, it would continue in Ronin. Otherwise, it is the same 225cc engine featured in the Zeppelin. This engine has a bore and stroke of 66mm. Nowadays it's respectable if it comes with 4-valves; this Ronin also has 4 valves. 2 for the inlet; 2 for the exhaust. It is a single-

cylinder engine. Fortunately, they have given oil-cooling instead of air-cooling. The same 5-speed gearbox as the Apache 200 sends power to the rear wheel.

It makes 20.4 bhp @ 7,500rpm. Its torque is almost the same! It delivers 19.93 Nm @ 3,750 rpm of torque. Even though this power is less for this cruiser. Its performance in the city is on another level. What surprised us was the roar of this motorcycle in the traffic. I mean, its low-end performance is awesome! This is due to the short gearing setup and the linear power delivery. It should be noted that its peak torque is available at 3,750 rpm. Ronin gives a feeling of riding a Bullet. For example, the Bullet 350 Classic delivers peak torque at 4,000rm. Admittedly, Bullet's delivery is 35% higher than this, although Ronin comes close.

Even though the Bullet power delivery is on par, you can tell it's a TVS bike by its exhaust. Its engine is very smooth. The exhaust note was also very sweet.

Like some small scooters and commuters, it has a silent start system. That's why riding this Ronin feels like riding a quiet cruiser. I mean, this Ronin would be the humble guy for peace lovers.

Its performance is smooth even in high gears at the low end! Starts with a bang from 3,000rpm. For example, I accelerate a little in top gear and reach 20 kmph. Tried downshifting to 3rd gear. Does not shift from 3rd gear. However, the response did not sag even when throttled over 20 kmph. This is what City Riders need!

The Ronin blends into the city with some smart work done by giving it a bigger rear sprocket like the KTM.

This Ronin, which has a great low end, shows a little slack when it comes to high-end performance. Ronin flies at 80 – 90 kmph without any lag. Even after 100 kmph, no fatigue is felt. TVS claims a top speed of 120 kmph. If you want 110 kmph, you can go. Even with revs up to 9,000 rpm, going beyond 8,000rpm seemed pointless. If so, TVS still needs to pass marks onhighway performance.

But we can't blame TVS for understating this. The reason is that TVS Ronin has already said that a high-speed bike is not their goal.

### **Ride and Handling**

When it comes to this, weight is the number one thing. Its weight is 160 kg, which isn't too much. The double-cradle chassis is what makes this bike so good. These 41mm USD forks are on the expensive Rs 3 lakh Apache RR310 bike. But the Ronin has fine-tuned the spring and damper setup for cruising, resulting in excellent handling. This damping setup is similar to that found on dirt bikes. They have given mono shock suspension at the rear. Ronin grippy even in the rain.

Its seat height is very comfortable for short people as well. 795 mm in height. Its ground clearance is 181 mm. It also excels off-road. Going off-road with a slightly upright handlebar position is like going dirt racing on a dirt bike. But it is not a complete off-roader. We can say it is more of a Scrambler.

Another aid to ride and handling is its slipper clutch. This helps prevent wheel spin by engine braking when reducing speeds. It includes both single-channel ABS and dual-channel ABS options.





### Features and ergonomics

A wealth of information is available in this single roundshaped instrument cluster. It is also easy to read. Perhaps the most important feature is the slipper clutch. This is what bikes like KTM have. Hazard lights have been provided as usual. Also, fortunately, this big bike also has a side stand engine cut-off feature.

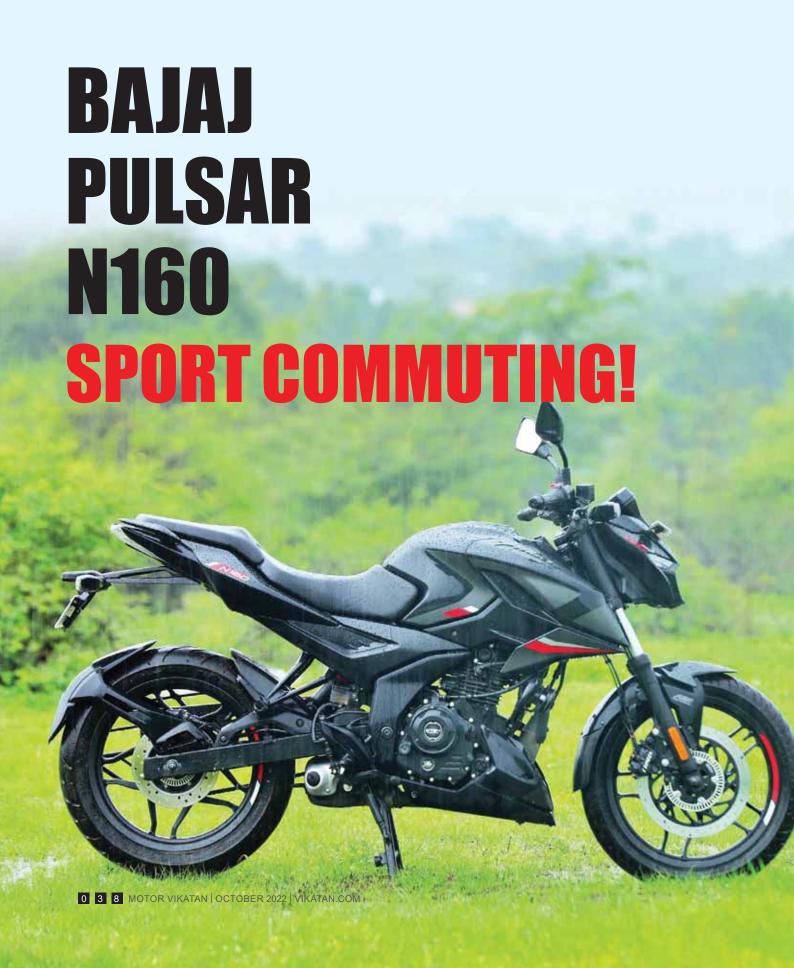
It has 2 riding modes. These only affect the sensitivity of the ABS. They have given single-channel ABS for the entry and mid variants and dual-channel ABS for the top variant. We can connect this bike to our phone and run it through the TVS app. Yes, it's a connected smart bike!

### Should you buy Ronin?

TVS has positioned it in the range of 1.50 - 1.69 lakhs for an impressive ex-showroom price. Single channel ABS and single tone is the initial variant. 1,57,000 for dual-tone colour in a single channel. 1.69 lakh for the topend dual-tone colour and dualchannel ABS. It is Rs 40,000 less than its competitors.

As for Ronin's flaws, there aren't many. Only the top speed. I would have been happy if I had gone to 120 km. So, highway riders would do well to take this into account. If you want a fun, peppy, quiet scrambler to ride around town, the Ronin is the one for you!













ajaj had recently launched its 3rd generation of its iconic brand, Pulsar, with the introduction of the N250 and F250.

The new Pulsar N160 is a smaller capacity sibling of those quarter litre machines. It is got little or nothing to do with the NS160. For many years now, India has had an oddball in the 160cc segment. Just 10cc more, differentiated this segment from the regular 'commuter' 150cc motorcycles. This segment was looked at through a younger, sportier prism. While a 150cc motorcycle would be ridden by middle-aged men to work, the 160cc was ridden by young folks headed to college and fun!

Bajaj has the class leading TVS Apache 160 firmly in its sights, as it launched the N160. Even though it uses the same platform as its 250cc counterparts, the smaller capacity engine ensures frugality. Better fuel efficiency results in more money in the pocket for high jinks, for college kids! You get all the sportiness of the Pulsar range without burning a hole in your pocket with your petrol allowance.

The N160 has the same design as the Pulsar N250. There is no change whatsoever and this will be loved by those buying the 160.

Not sure how the 250 owners will feel about this! The biggest visual change is the exhaust, rather than having a side slung exhaust as in the 250, the smaller iteration gets an underbelly exhaust like the NS. The dual-channel ABS version of the N160 comes in a gorgeous black. Taking the Pulsar back to its original 'hooligan' roots.

The wheelbase of the N160 is 358 mm, slightly longer than the N250, which is surprising. Possibly necessitated by the placement of the exhaust. As we mentioned, the dual channel ABS is available in black only as of now. If you want other colour options, then you must choose the single channel ABS. Not just that, the cheaper variant also gets 31 mm forks, rather than the 37 mm found on the N250. The brake disc size also varies between 280 to 300 mm for the lower and higher spec N160.

The instrument cluster on this bike is the same as we found on the N250. Part analogue and digital. It has all the basic information like gear indicator, clock, fuel level, USB charger etc. There are no elements that you would miss for a regular city bike.

The N160 comes with a saddle height of 795 mm and a kerb weight of 154 kg for the dual-channel version. The single-channel version is lighter by two kilos. Fuel tank on the Pulsar N160 has a capacity of 14 litres, which is more than enough for city riding and a bit of highway excursions as well.

The engine is the sweet spot of the motorcycle. It is a smooth 164.8ccengine mated to a 5-speed gearbox. It doesn't remind you of the old Bajaj motorcycles, which had a distinctive vibe to it! Power delivery is linear and you can

TOL 80

cleanly rev through the gears as you build up speed rapidly. The oil cooled engine is a 2-valve twinspark mill.

The riding ergonomics are definitely on the sportier side. It is aimed at younger riders and it is positioned physically as such. On a track, you automatically feel like getting into a racer's crouch. The longer wheelbase provides excellent straight-line stability, while the tubular chassis gives

good feedback as you try to hug the corners. Once you cross 100 kmph, you start feeling vibrations creeping into the single-piece handlebar. The bike is geared perfectly for brisk acceleration and you never feel bogged down. Braking performance on this bike is more than satisfactory.

The Bajaj Pulsar N160 has excellent fit and finish, though the switchgear could have been slightly better. Also, it would be nice to have a fully digital console in this day and age!

The Pulsar N160 Single-channel ABS variant is priced at INR 1.22 lakh, while the dual-channel is 5000 more. We think it is worth the extra money. This bike will also save you a cool 20 grand over the N250, a big difference for young 'not so deep' pockets! Bajaj claims that this little powerhouse will return 48.5 kmpl. We would love to ride it longer to test out that claim!

A good machine which will surely take the fight to the Apache 160 and give users a viable option.





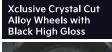
The sophisticated Sonet X-Line is here to tempt you with its Xclusive Matte Graphite exterior, Splendid Sage Dual Tone interior, and futuristic technology that you just can't resist.



Awe-inspiring exterior that will make the roads envy you



Tantalising combination for your senses





R16 - 40.64 cm (16") alloy wheels to give you the ultimate resolute stance

Xclusive Black High Gloss Grille with Piano Black Diamond Knurling Pattern



Kia Signature Tiger Nose Grille now wilder than ever

Xclusive Piano Black Front Skid Plate with Dark Hyper **Metal Accents** 



Makes the front end look distinct and more attractive

**Xclusive Dark Chrome** Fog Lamp Garnish



Lends an aggressive look to

Clusive Piano Black Rear Skid Plate with Dark **Hyper Metal Accents** 



Amplify the 'mean machine' looks when you drive away

Choose your own style:







For more information contact: 1800 108 5000 | Visit www.kia.com/in | 🜀 Book Kia Sonet X-Line 🔖 | 👂 09319591407 | Look for "Kia India" @ 🕇 🗿 🗈 🖢













\*T&C Apply. The product shown is for representation purpose only, actual features, colors and specifications as shown may not be part of standard fitment and may vary. Visit your nearest Kia dealership for more details. Segment is defined as Vehicle with length between 3990 mm - 3999 mm and height - 1570mm, "With R16 alloy wheel and roof rails, Kia India Pvt, Ltd. (Formerly known as Kia Motors India Private Limited) reserves the right to make any changes with respect to the trims, colors, specifications and other details of any model as mentioned or to discontinue any model or to modify/discontinue any service without prior notice. Kia urges you to follow traffic rules, these are meant to keep you safe on roads.



BMW recently launched the G310RR in Delhi and the bike sent the mercury rising, just as it was in the national capital!

The new BMW is at the heart of it the same as a TVS Apache RR310. But now it comes with a different badge and two new paint schemes.

The bike has the same TFT display as what is available on the TVS, with the addition of the BMW logo in it. Surprisingly, the BMW does not come equipped with Bluetooth, a feature which is already present in the Apache.

The Apache comes shod with Michelin's Road 5 tyres, while the BMW gets Michelin Pilot tyres. What is more surprising is the brakes. A petal disc does duties on the TVS, while the BMW gets

regular discs. Not a big deal, but it does make you sit up and think.

When we were kids, magazines used to carry two images, and you had to spot the differences between the two. It does feel like a similar game when looking at the TVS Apache RR310 and the BMW G310RR. It is difficult to find the differences between the two machines, as it is mostly identical.

The bikes use the same engine, frame, suspension and brakes. It also has the same riding modes as the Apache. 34 bhp power, 27 Nm torque, and 174 kg kerb weight all remain unchanged. Even in the suspension department, the same USD forks and monoshock is employed. Apache has fully adjustable suspension, while on the BMW only the preload can be adjusted.

The Apache is available in a matte black finish, while the BMW gets a gloss paint scheme. You also can get the BMW in its iconic white-red and blue paint scheme. Now that is something which might get hearts beating harder!

The black BMW G310RR is prices at INR 2,85,000 exshowroom. Which is 20,000 more than the Apache. And if you opt for the racing edition of the BMW, then you have to shell out 14,000 more, taking the cost up to INR 2,99,000 ex-showroom.

Are these prices justified? Well, that is for the market to respond. To see if the BMW badge is attractive enough for riders to pay the premium over the TVS or not. Most riders, we think, will simply go for the Apache...









Ithough there are many bikes in this `naked street bike' segment, the MT15 has a special place. The reason for that is its mileage. It is a 150cc motorbike with a mileage of 45-50kmpl. It claims to get a mileage of 55-50kmpl on the highway. This is why many people like and buy this bike. Although it is already in the market, Yamaha has brought a lot of upgrades to this MT-15 and launched it as V2. That is version 2.

### **Changes:**

The first upgrade to look out for is the front fork. This fork is available in an eye-catching golden colour. The previous model had a 'Telescopic Fork', this new MT 15 has a 'Telescopic Upside Down Front Fork'. This helps keep the bike stable while riding and making sharp turns. Second it uses an aluminium swingarm. Due to this, its wheelbase has decreased. It is suitable for throwing the bike left and right in the city. The third is its colour. The MT15 comes in colours like Grey, Black and Blue. The new grey-blue variant with red and blue mixed with grey is attractive. Its blue-coloured wheel adds to the appeal of the bike. In fact, this new grey-blue variant could be the choice of many.

### Design

It's an old model. Not much to say about the design. Its design is as sharp as a Japanese samurai sword and instantly captures the hearts of onlookers.



Multi-functional negative display instrument cluster... You can connect the bike through the Y



The blue alloy wheels and the exhaust design are awesome.



Same 155cc engine... 18.4bhp power... Mileage is a big plus.



Raised LED Tail Light - Slim and Sleek Design...

### **Performance**

Yamaha has now started giving 'Variable valve actuation' in all bikes. The new MT-15 also has this feature. It has two intake valve cams. It still gets the desired torque delivery even when riding at low rpm. These two valves work alternately to keep power in all gears. It also has an 'Assist & Slipper Clutch'. This helps the engine stay smooth while downshifting.

### Instrument cluster

It has a multi-functional negative display instrument cluster. Through this, you can check phone calls, e-mail, message notifications, battery level etc. With a connected feature, there is a facility to view the last bike parking, last trip, top speed so far, etc. on the smartphone.

With LED indicator, tank pad,

seat cover, USB charger, mobile holder, stickers, riding jackets and other accessories, you can customize the bike as per your wish.

### **Engine**

The new MT-15 is powered by the same 155cc engine as before. Yamaha claims that it can fly at a top speed of 130 kmph. It is very smooth in city riding. But when it goes above 100, the vibrations are felt. Its wide handlebar is perfect for manoeuvring in traffic. Another reason for this is its lightweight. This bike weighs just 139 kg. This makes it very easy to handle. It has a seat height of 810 mm. The ground clearance is 170mm. Overall acceptable!

### **Braking**

The earlier MT-15 had single channel ABS. It was expected that this new version will come with a dual channel. But there is no change. The new MT-15 has the same single channel. While there are many bikes in this naked street bike segment, as we said earlier, the MT-15 beats the hell out of it in terms of mileage and 0-60 kmph. Along with the pluses, its price is its villain. 1.97 lakh on-road price is a bit too much for this 155cc bike!

### **Photo Captions:**

Same 155cc engine... 18.4bhp power... Mileage is a big plus.

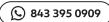
Multi-functional negative display instrument cluster... You can connect the bike through the Y Connect app.

### Raised LED Tail Light - Slim and Sleek Design...

The blue alloy wheels and the exhaust design are awesome.







volkswagen.co.in

Terms and conditions apply. \*Ex-showroom price. Images are for representation purpose. ~Per km cost is calculated basis the Essential 4-year Service Value Package cost for 60 000kms or 4 years. #Forever Care includes 4-Year Standard Warranty, 4-Year Roadside Assistance and 3 Free Services - 1 000 kilometres, 7 500 kilometres and 15 000 kilometres service only labour charges are free. Actual features, accessories and specifications may vary depending on variant and/or Country, Features and accessories shown may not be a part of standard equipment and are subject to change without prior notice. Actual colour may vary. Segment means Mid-size SUV with length between 4.2 Metre-4.35 Metre and Width between 1.75 Metre to 1.80 Metre. Based on Publicly available information. The dark shade on the glass is due to the lighting effect. For further details, please visit our authorised dealership. Obey traffic rules, always wear a seat belt.



Authorised Dealers: Volkswagen Mount Road: Whites Road: 9500091000, 8754440908, Arcot Road: 978998476, Volkswagen Madras: Anna Nagar: 9840911716, 8056099499, Alandur: 9940057890; OMR: 7708033322, Volkswagen Chennai: Nandanam: 9840036789, 9940057890, Ambattur: 7708033325, Volkswagen Coimbatore: 9566444442, Volkswagen Digital (Coimbatore): 9500967834, Volkswagen Tirupur: 9952555223, Volkswagen Madurai: 9677444448, Volkswagen Sivakasi: 9500944504, Volkswagen Salem: 9677444446, Volkswagen Hosur: 9629531777, Volkswagen Vellore: 9344721666, Volkswagen Kancheepuram: 9344721666, Volkswagen Pondicherry: 9840911716, Volkswagen Trichy: 9500707711, Volkswagen Thanjavur: 9047305777, Volkswagen Erode: 9629833777, Volkswagen Karur: 9629611444, Volkswagen Tirunelveli: 9500967864, Volkswagen Nagercoil: 8489912181

## TRACK & ROAD CHAMPION



### HP45100 RR

his bike is a little special and this review is also a little special. The BMW \$1000RR has dominated the race track since its debut in 2008. This review is not just about RR. It's a special edition \$1000RR HP4. This HP4 means High Performance 4 Cylinder Engine. Although BMW launched a track-specific model in 2017, the 2015 model HP4 strikes a balance between track and road riding, and this model remains a favourite to this day. This review will look at the 2015 \$1000RR HP4. Every HP4 model produced worldwide has a badge number. The bike we rode was 2670. One of the four bikes available in India.

Speed is the magic of the race track. Faster and lighter bikes are superstars on the track. The HP4 has been built by cutting as much weight off the BMW \$1000RR as possible. Handling, power, and riding dynamics have all changed here.

No need to weigh. It is a lightweight bike. Tank cowl, subframe and body panel are fitted with carbon fibre parts. 2.4 kg weight has been reduced in the sprocket alone. The Akrapovic exhaust pipe is made of titanium. 4kg weight reduction in exhaust alone as there is no catalytic converter. The battery of this model is also very light compared to the \$1000RR. A total weight loss of 7

kg has made a huge difference in performance. Not only that; It has changed the steering of the bike dynamically.

A lot of things have been made with the track in mind to get high performance. For example, the gear lever and brake have been redesigned and the weight has been reduced. Different ergonomics for each rider. As one can change the footpeg position as per one's convenience, the riding ergonomics are not static but exclusive to us. Forged Aluminium Hollow swingarm is an example of bike frame rigidity.

It is the suspension that determines the handling quality no matter the road. Compression, rebound and damping are three important functions of a suspension. This damper is there to correct if the handlebars are not able to withstand the rebound of the suspension when going fast. If other suspension components are available, one of the unique features of the HP4 model is the Electronic Dynamic Damping Control (EDDC). The HP4 excels at the brutal speed of the race track and the challenging undulating tar road of Kari Motor Speedway with a smooth ride. Whether it's a bumpy country road or a smooth winding race track - there's no need to think about the suspension

setup. Electronics will take care of most of the work.

The HP4 bike's floating disc Brembo brake setup keeps the braking bite responsive in bends even without cornering ABS. You can ride without thinking about wheel lock.

We met racer Yogeswaran Krishnavelu who was testing the HP4 at the race track. Yogesh is not just a bike racer; he says that he will enjoy whatever is fast, be it a car or a kart. Ducati UAE Race 2018-19, 2019-20 Champion. National Rookie Champion of MRF F4 Car Race last year.

"Started my career in Motocross. Now I do bike races and kart races on international race tracks. This BMW HP4 bike is called the Competition Edition. There is no shortage of handling whether it's road or track. Whether you're riding on a track, taking a corner, or taking a bend on a mountain road. It's dynamic damping system and brakes are great. Its light weight reduces the physical effort required to ride the bike. There are only 4 HP4 competition bikes in India so far. I have one in Tamil Nadu, Coimbatore. Whatever the bike, ride carefully and smartly!" says Yogesh.



# SMALL BIKES BIG ADVENTURE



nthelastdecadeorso,we've seen the constant growth of adventure motorcycles in the global motorcycle market. Large capacity adventure bikes gradually overran the big bike market. Leading the sales for most manufacturers. Every brand had to enter the segment and have a competitive offering to stay relevant.

As with most things' motorcycles, the market grew in more ways than one. Mostly in terms of engine capacity, adventure bikes kept getting bigger. It was bound to eventually reach a point where increasing the motorcycle capacity was no longer an attraction. The bikes were becoming too big, bulky and unwieldy, the polar opposite of having an adventure!

Which has led to the rebirth of small capacity adventure bikes. These bikes were fuelled by markets like India and other southeast Asian countries. Price sensitive markets where large capacity bikes sell in limited numbers. The upside to these bikes is that it can be sold to A2 licence holders in Europe.

Markets and marketing aside, what are the real-world benefits of small capacity adventure bikes for actual users?

### Why Buy Adventure?

Here's why you should buy a small bike with big adventure capabilities:

**Light Weight:** Small capacity adventure bikes are significantly lighter than their larger capacity counterparts. Anybody who has ridden on dirt trails will tell you that, falling is mandatory! At some point of time, you will drop your bike while riding in the dirt. Lifting a small bike is much easier than a big bike. Especially if you are riding solo.

### **Better Manoeuvrability:**

Basic physics we all learnt in school tells us, that heavier objects need more force to change direction. Lighter bikes are not just easier to manoeuvre when out riding the trails, but also much better for city commuting. No matter what bike we ride, we end up using it to commute quite a bit.

**Pocket Friendly:** Smaller bikes are not just much cheaper to buy, but also to maintain. And with spiralling fuel prices, the better fuel economy is the perfect bonus!

Designed to Fall: The designers of adventure bikes know these bikes get dropped regularly. It is therefore designed in a manner to incur minimal damage in a fall.

Go Anywhere: Adventure bikes are designed to go beyond the end of the asphalt. Where others will take a U-turn, you can go farther along your adventure. These bikes are also good with their highway manners. It does give you the best of both worlds.

**Increased Saddle Time:** Built to travel long distance, the ergonomics, suspension setup and engine tune are all geared to allow you to spend longer hours in the saddle in reasonable comfort. This is one of the big reasons why older riders, end up preferring adventure bikes to fast looking sport motorcycles!

Handling: Earlier adventure or dirt focussed motorcycles were terrible to ride on asphalt. With the chassis and suspension tuned for dirt, it would become a pogo stick on the road. With improved metallurgy tech being used in chassis, better suspension systems available and greatly improved dual-purpose tyres, modern Adventure bikes handle incredibly well. A skilled rider can do some serious canyon carving with these bikes. Not quite the scalpel, new adventure bikes are still quite the sharpened knife!

Design: Looks are always subjective and adventure motorcycles are no different. But







unlike street nakeds or sports bikes, in which looks play a dominant role. Adventure motorcycles are built to function flawlessly. Around this functionality the design is born. Functional designs are much easier to live with on a day-to-day basis for owners, rather than designs based on form.

### **How Big or Small?**

Which brings us to the next question. Within the small capacity

bikes available in the Indian market, the range starts from 200 ccall the way to 500 cc motorcycles. Which should you choose? Some adventure bikes are more trail biased, compromising on road capabilities. While others are more road biased, comprising trail capabilities. Choosing a ballpark capacity is more subjective rather than objective. It depends on each rider's requirements.

We answer this with a titbit of information from Dakar, the mother of all adventures. Dakar motorcycles are limited to 450 cc engines. Infer what you will from that information!

### Choices of Life...

The Indian motorcycle market is currently teeming with options to choose from within the adventure segment. Here's the list of bikes for the ardent adventure lover:

### Honda CB 200X



The bike which doesn't entirely belong in this list. It finds itself here more because of its ADV inspired looks than its usage. Even Honda positions this bike as a smart commuter rather than an adventure bike. It has a 184.4 cc engine, which puts out a 12.7 kw and weighs 147 kg. Buy this if your maximum usage is going to be commuting with infrequent spirited rides off-road.

Positives: Lightweight, tubeless tyres, sorted suspension and great handling.

Negatives: Insufficient power for highways or trails, 17-inch wheels aren't great on trail, just 167 mm of ground clearance.

### Price: INR 1,47,535 Ex-Showroom Delhi.

### Hero Xpulse 200 4V



The Hero Xpulse, is a small and economical adventure motorcycle in the market currently. The bike is equipped with a 199.6 cc engine producing 19.1 PS of power and weighs 158 kg. It also sports a 21-inch wheel at the front. This bike is good for people who will spend more time on the trails rather than long highway runs.

Positives: Lightweight, good suspension, large front wheel will easily go over obstacles and good ground clearance.

Negatives: Small tank, less power for modern Indian highways, tube type tyres.

Price: INR 1,36,378 Ex-Showroom Delhi.

### KTM 250 Adventure



A power packed orange machine sporting its Austrian genes with flamboyance. The 248.76 cc engine on this bike produces 30 PS and weighs 177 kg. A great option for people who want a motorcycle than will be at home on the highways, trails and in city commutes as well!

Positives: Great power, decent weight, decent fuel capacity, slipper clutch, liquid cooled, fantastic handling and braking. 200 mm ground clearance is decent without being great.

Negatives: 855 mm seat height would make it uncomfortable for many Indian riders.

### Price: INR 2,44,205 Ex-Showroom Delhi.



This bike is, as the company claims, your 'entry to adventure'. The TRK 251 has a 249 cc engine which belts out 19 kw and weighs 164 kg unladen, which be closer to 185 kg with all liquids filled. It looks the part of an adventure machine and is great for people looking for something different to buy.

Positives: Good looking machine which would be more comfortable on highways rather than trails. 18 litres fuel tank.

Negatives: Fewer service centres and dealerships as compared to other brands in India. Also, a bit heavy to throw around the trails with confidence.

### Price: INR 2,79,000 Ex-Showroom Delhi (Approx.)

### Suzuki V-Strom SX



This little adventure tourer from the house of Suzuki has an oil-cooled 249 cc engine powering it to 26.5 PS and weighs just 167 kg. The bike is a perfect offering from the Japanese manufacturer for people who want a 'do it all' motorcycle.

Positives: Decent power to handle highway and trail rides. 19-inch from wheel for decent off-road capabilities. 205 mm ground clearance to clear most obstacles. Tubeless tyres.

Negatives: Small fuel tank of just 12 litres.

Price: INR 2,11,600 Ex-Showroom Delhi.

### **BMW G 310 GS**



f you want the iconic Bavarian brand parked in your garage, then the G 310 GS makes a lot of sense. This motorcycle is powered by a 313 cc engine producing 34 hp and weighs 175 kg. This bike is great for riders who want the BMW brand and a capable highway muncher.

Positives: Solid build with a refined engine, good suspension and neutral handling. This road biased machine is okay on gravel roads, but not quite on trails, even though the 19-inch front wheel helps on the rough patches.

Negatives: 11 litre fuel tank is small for highway distances. Price is on the higher side; you are paying a premium for the brand.

### Price: INR 3,10,000 Ex-Showroom



This adventure bike comes from the brand which was recently reborn with the Jawa Yezdi classics. It now also offers an Adventure motorcycle. For better or worse, the bike looks far too similar to the Royal Enfield Himalayan, which has somewhat become the benchmark in the Indian adventure market. This Adventure has a 334 cc engine which produces 30.2 PS of power and weighs a relatively high 188 kg.

Positives: 21-inch front spoke wheel means this bike is made to tackle some seriously gnarly terrain. A generous 15.5 litre tank also helps with longer rides before being forced to stop.

Negatives: Fewer customer support points in comparison to other brands present in India.

### Price: INR 2,12,900 Ex- Showroom Delhi.

### KTM 390 Adventure



Big brother to the 250, the 390 Adventure takes the action up a few notches. It is one of the quickest bikes in this list and is a weapon for commuting and highway munching as well. It is also quite the handful when playing in the dirt. The 373.27 cc engine on this Adventure puts out 43.5 PS power and weighs 177 kg. A great machine for people looking for raw power along with sophisticated electronics to tame it all.

Positives: Excellent power to weight ratio. Decent ground clearance at 200 mm. Excellent suspension and chassis setup gives incredible handling capabilities. Stellar braking performance from the 320 mm front disc. A 14.5 litre fuel tank gives decent range, but not great.

Negatives: 855 mm saddle height can be problematic for some riders. Extra electronics means additional complications. Pricey!

Price: INR 3,37,043 Ex-Showroom Delhi.

### Royal Enfield Himalayan



A trendsetter, the first motorcycle to break cover in the Indian market and give the junta a taste of adventure motorcycling. One of the reasons other brands flocked to Indian shores was the success of the Himalayan. A motorcycle immediately identifiable with adventure, it comes equipped with a 411 cc engine belting out 24.3 bhp and weighs in at 199 kg. A great all-rounder motorcycle at a fantastic price.

Positives: The price makes it extreme value for money. Fantastic for trail riding. Decent for highway cruising. 21-inch front wheel and 220 mm of ground clearance makes it ideal for rough terrain. Just 800 mm seat height is useful for shorter riders.

Negatives: Heavy at 199 kg. Long stroke engine means it isn't as quick off the blocks as the competition. Tube type tyres. Brakes aren't as great as some of the competition.

### Price: INR 2,14,000 Ex-Showroom Delhi.

### Honda CB 500X



The only motorcycle on this list which houses a twin cylinder engine. This 471 cc parallel twin produces 35 kw and weighs 199 kg. A motorcycle in a different league compared to the rest because of its price point and engine configuration. Get it to feel the finesse of a Honda while you go adventure touring around the country.

Positives: Smooth parallel twin engine. Enough power and torque for trails and highways. 17.7 litre fuel tank to keep you munching miles without stopping frequently. 19-inch front wheel will roll over most bumps without a problem.

Negatives: Ground clearance of 181 mm is not great on the trails.

Price: INR 5,79,952 Ex-Showroom Delhi.

### **Choices!**

Each motorcycle has its selling points and what you buy depends entirely on your requirements. For pocket friendly adventure, the Hero Xpulse is a fantastic machine. If you are looking at overall capabilities of a machine, then the KTM 390 Adventure makes a lot of sense. There is no machine to beat the value for money that the Royal Enfield Himalayan is offering. And if you want the joys and experience of owning a twin cylinder bike, then the Honda CB 500X makes perfect sense.

We, Indian tourers and adventure riders, are lucky to have a market with a number of options of varying size, capability and price, so that each one of us can fully enjoy our quest for adventure...

## WE ARE WORKING ON VARIOUS ENGINE TECHNOLOGIES

**CV RAMAN** 

ndia's largest car maker Maruti Suzuki has recently launched its midsize SUV, the Grand Vitara. The SUV comes with strong hybrid technology that increases fuel efficiency by 35 per cent and also comes with an all-wheel drive (AWD). In a freewheeling interview, CV Raman, Chief Technology Officer, Maruti Suzuki India shared the details about the strong hybrid that is used in the Grand Vitara and the company's focus on cleaner fuel engines with Motor Vikatan.

How is Maruti Suzuki working to reduce carbon emissions in its entire segment? Is it a strategic move to bring a strong hybrid in that direction?

We have been looking at various alternate technologies to complement our internal combustion engine technology. One side, we have started the electrification process and on the other side, we already have our intelligent or smart hybrid or mild hybrid technology on the 1.5-litre engine. Now we also have the Toyota New Global Architecture (TNGA) strong hybrid system, which has been incorporated and integrated into the Grand Vitara. At Maruti Suzuki we always look at cleaner technologies for our entire segment, starting from lower-end to higher-end cars. All of them have to improve fuel



efficiency as well as improve the carbon footprint to reduce CO2. As already announced we will be having our first electric vehicle in 2024-25 but apart from that, we are also working on ethanol, flex-fuel, CNG and bio engines. So all of this development is to ensure that we enable India to reduce the carbon footprint going forward and also offer the right kind of optimised solutions to the customers right from the lower to top end. So that's our basic thought process to use the strong hybrid in Grand Vitara. Till the time the charging infrastructure grows at both home and in public, we will continue with this hybrid model. So it's our step forward for the electrification process.

### Take us through the technology behind this strong hybrid system and how it is efficient?

The strong hybrid technology that we have used in the Grand Vitara has two motors. One motor is only for charging and another one is for traction. So whatever energy is lost during regeneration or braking or deceleration, we're able to recoup that and charge the battery. Once the battery is charged, that gives that energy to the traction and it then works in tandem with the IC engine. So it keeps switching between petrol mode and electric mode seamlessly. This gives a 35 per cent improvement in fuel efficiency, so the CO2 for this is about 85 grams per kilometre, which is about 27.97 kilometres per litre from a fuel efficiency perspective. And the other thing is that it is self-charging and you don't need any external charging. So you can able to drive in the EV mode for about 30 to 40 per cent of the time and especially if the charge is full in the battery you can start the engine in the EV mode. So this switching happens then and there.

### Since you have an additional battery, is that add more weight to the car?

It is a very small battery. This power battery doesn't hold energy. Its main function is to charge and discharge in a very fast cycle and that's the main technology of this battery. The battery pack sits behind the rear seat and it might look big but from the kilowatt

perspective, it is only 0.78 kWh. So there is no big weight due to the battery.

### It clearly says strong hybrids give better fuel efficiency so is there an intent for Maruti Suzuki to come up with more hybrid variants?

We are studying all the possibilities. We have just launched this strong hybrid system and we have to see how this evolves over a period of time. As I said, improvement in fuel efficiency and also a look at what is the right optimised solution for each of our segments. And this means we have to develop more strong hybrids.

### Will this strong hybrid suit only for the SUVs or will it also cater to other segments?

It can cater to any segment, but today the cost of the hybrid system is a little high compared to the ICE. The GST is also not favouring hybrids when compared to electric. So localisation is one option that would help to reduce the cost. Till now no one has introduced a hybrid technology in the mass market. So with the help of Grand Vitara, we want to showcase the capabilities of strong hybrid technology and see how people look at this and how the perception changes in the near future.

### Since Toyota Hyryder and Maruti Suzuki Grand Vitara share the same platform and both are identical, how Maruti Suzuki is geared to compete with it?

We have to compete on pricing and bank on our service network, which is our biggest USP. There is a difference between the two products and we are very confident in our product. M

### SPECIAL CORRESPONDENT

Identified nearly 500 acres of land for the unit and plans to start operations soon, Mallawa hydrogen buses to be on the roads by mid-2023



### **MALLAWA VENTURES:** HYDROGEN **POWER IN CHENNAI**

ullish on the future of green mobility and the 'Make in India' initiative, Mallawa Ventures, Inc.an early-stage Global Technology provider specializing in Smart CitiesTransportationtoday announced that it plans to set up a Hydrogen-powered Bus Manufacturing Plant in Chennai. A senior official of the Company said that Mallawa plans to invest Rs 8,000 crore (Nearly USD 1 billion) in India by 2030 in the alternative fuelpowered transportation sector.

Mallawa Ventures, as a leading global investor, supports and grows the world's

Nearly 3,000 direct job opportunities are to be created at the Chennaibased unit.

Manufactured in Chennai Mallawa Ventures Hydrogenpowered e- buses to hit roads by mid-2022; Plans to invest Rs 8,000 Cr. by 2030

most innovative technology and renewable energy. The company would also set up a unit here that would produce hydrogen to meet the fuel requirements of the buses. A hydrogen fuel generation plant produces hydrogen from LNG by SMR and also by Green Hydrogen generation (GHG) methods. The fuel is stored as LH2 or as Gas. The fuel generated will be transported in specialized cylinders to the dispensing depots.

"While people are still juggling between Petrol, Diesel and CNG, Mallawa Ventures has introduced H2O Fuel Cell Buses. All these buses would be 'Make in India buses and are fully air-conditioned with high-quality air suspension, smart motor, an intelligent battery and associated components that also are completely made in India. We will be rolling out hydrogenpowered buses in India by mid-2023. We will be setting up our manufacturing and hydrogen plants in Chennai, Tamil Nadu," Raj Karan, President and CEO, Mallawa Ventures.

Mallawa Ventures Inc. supports innovative technology and now in India, the company would enable Smart Mobility, Zero Emission e-Buses -Powered by Custom-Al-ML-DL solutions. These buses have a powerful battery bank that can have a minimum of 7800 cycles. Moreover, one charging station can charge 25 buses. 1 Station has a capacity of charging 52 Buses/24 hours. Customer Analytics, Predictive Maintenance, Network Planning and Route Design, and Batter usage and monitoring are other key features of the Mallawa e-Bus.

"Not only addressing the challenges of climate change is our priority but we also want to create thousands of direct and indirect jobs opportunities for the people of Tamil Nadu. Only one unit in

Chennai would create direct job opportunities for over 3,000 people initially. We aim to be a Net Zero Company by 2030 and build partnerships around the world to build a Net Zero Ecosystem for a Sustainable Transportation Solution," the CEO said.

According to the senior official, the 12M bus would be available in three variants of floor heights -

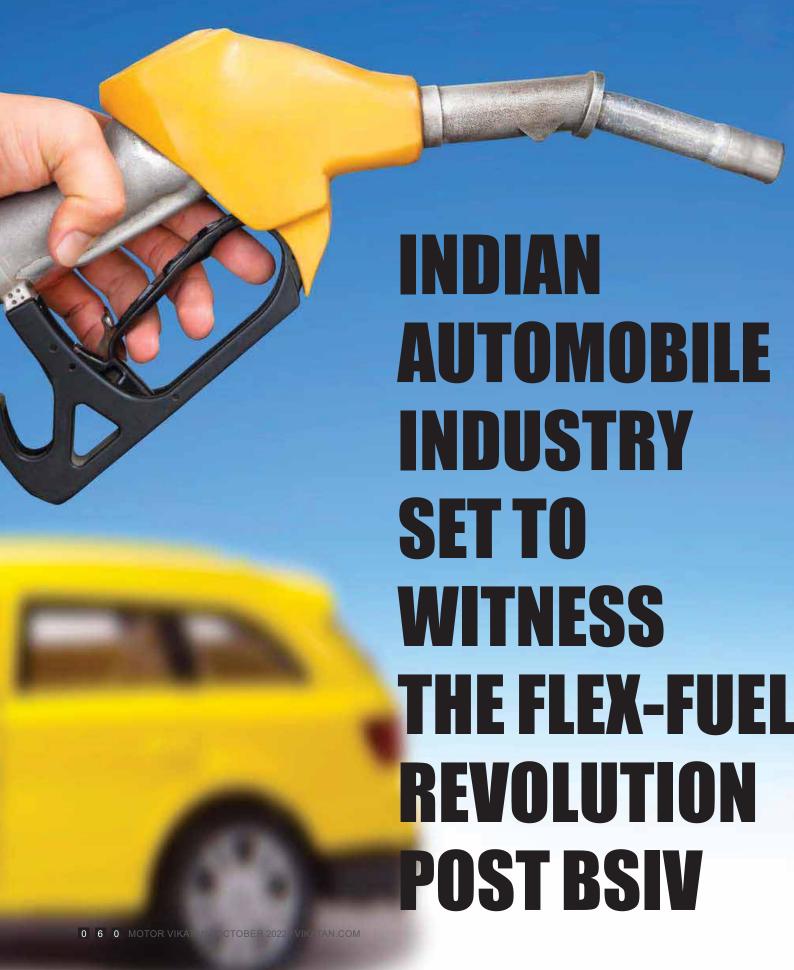
400mm, 650mm and 800mm. All three variants can run from 350 km to 750 km per charge.

Mallawa's e-buses are expected to save huge costs for fleet operators and cities of Tamil Nadu would be able to get a smart eco-friendly solution in the shortest turnaround of time with a futuristic state-of-the-art of transportation solution for current and future generations to benefit.



### **ABOUT MALLAWA VENTURES**

Mallawa Ventures, Inc. an early-stage Global Technology provider specializing in Smart CitiesTransportation-Telecom and Mobile solutions has technical depth with significant experience in commercializing new technologies. Over 7 Decades of combined experience in rolling out enterprise- class products to Fortune 100 clients in the United States, Africa and SE Asia. Mallawa Ventures, Inc. is a leading global investor that supports and grows the world's most innovative technology and renewable energy companies through venture investment, expansion, and growth capital. Our fund managers come with extensive expertise in managing funds greater than \$ 5 Billion. We raise capital and invest in Technology; Renewable Energy companies with significant growth potential focused upon Technology, Energy, Infra, FinTech, Telecom, Solar and windmills. Our footprint is spread across the US, CANADA, SOUTH AFRICA, INDIA, and MIDDLE EAST and rapidly growing.







The 2G Ethanol Plant has been built at an estimated cost of over Rs 900 crore by Indian Oil Corporation Ltd. (IOCL) and is located close to the Panipat Refinery.

Given the skyrocketing fuel prices, the blending programme has a dual purpose – to reduce the crude oil import bill and to allow consumers access to environment-friendly fuel. For this, Oil Marketing Companies (OMCs) have already been mandated to buy ethanol from sugar mills and clear payments within 21 days. The decision would help sugar mills diversify their portfolios faster from just sugar production and become self-reliant in paying cane growers.

In the last eight years, ethanol blending has increased to 10.16 per cent from 1.4 per cent. India is the third country after Brazil and the United States to produce ethanol from agricultural waste. Like the shift from BSIV to BSVI, the efforts to be flex fuel-ready wouldn't be too different either.

Varying degrees of engineering intervention would be required in the fuel, electrical, and exhaust systems, and most importantly in the engine. Components like the piston, cylinder block, cylinder head, injectors, and fuel rail, to name a few, will have to change. Technology changes and material re-engineering will have a cost implication for Flex fuel vehicles, though not to the extent as was seen in the BSIV to BSVI shift.

Recently Prime Minister of India, Narendra Modi inaugurated the second generation (2G) Ethanol plant in Panipat which will help reduce pollution in National Capital Region (NCR). The factory is also part of the country's measures to reduce its dependence on oil imports and meet its net zero carbon goal. India, one of the world's biggest

emitters of greenhouse gases, has set a 2070 goal for net zero carbon emissions and has expedited steps to switch to cleaner energy to cut projected emissions by a billion tonnes by 2030. Indian state-run oil firms have announced plans for 12 plants in several states to produce ethanol using farm waste.

The new plant is part of a long series of steps taken by the government over the years to boost the production and usage of biofuels in the country. The 2G Ethanol Plant has been built at an estimated cost of over Rs 900 crore by Indian Oil Corporation Ltd. (IOCL) and is located close to the Panipat Refinery. The plant will generate 100 kilolitres of ethanol a day, which is equivalent to about 100 tonnes.

Based on state-of-the-art indigenous technology, the project will turn a new chapter in India's waste-to-wealth endeavours by utilising about 2 lakh tonnes of rice straw (parali) annually to generate around 3 crore litres of Ethanol annually. The project will have zero liquid discharge. Through the reduction in the burning of rice straw, the project will contribute to a reduction of Greenhouse gases equivalent to about three lakh tonnes of carbon dioxide equivalent emissions per annum, which is like replacing nearly 63,000 cars annually on the roads.

Nitin Gadkari, Union Minister for Road Transport and Highways said, electricity, ethanol, methanol, bio-diesel, bio-CNG, bio-LNG and hydrogen are the future of the automobile industry. "We have surplus sugar, corn and rice. It is an important time for the country to opt for alternative fuels,



particularly ethanol. It is fuel from the farmer," he added.

India will start supplying petrol with 20 per cent ethanol at select petrol pumps from April next year and will ramp up supplies thereafter as it looks to cut oil import dependence and address environmental issues. India, which achieved the target of supplying petrol mixed with 10 per cent ethanol (10 per cent ethanol, 90 per cent petrol) ahead of schedule

in June this year, has advanced the target of making petrol with 20 per cent ethanol by five years to 2025. The original target for doping 10 per cent ethanol, extracted from sugarcane and other Agri commodities, in petrol originally was November 2022. The 10 per cent ethanol blend translated into a forex impact of over Rs 41,500 crore and reduces greenhouse gas emissions by 27 lakh tonnes.



**AVINASH NORONHA** 



In the July 2022 issue, we brought to you all the news prior to the 5-week long summer break in MotoGP. Then, it seemed the championship was Fabio Quartararo's, now we aren't so sure!

Before delving into the juicy details of the races which have happened since, we bring to you the biggest bit of news from the world of MotoGP. As the pinnacle of motorcycle racing recently announced that they signed an MOU to hold a race at the Buddh International Circuit in NCR. Rumours abound that the race

could be held as early as 2023, but that seems unlikely. Realistically, we can expect a race in India in 2024. Needless to say, we are extremely excited!

Now back to the business of racing.

### **Silverstone**

The first race after the summer break kicked off at one of the best circuits on the calendar, Silverstone in England. The Monster Energy British Grand Prix threw up an incredible race with a lot of overtaking for every position on the grid. Francesco Bagnaia, on

the Ducati, rode a near flawless race, to overtake first his teammate Jack Miller, then Suzuki rider Alex Rins, to take the lead. He was pushed on the last two laps by Maverick Vinales on his Aprilia. Bagnaia held his nerve to take the victory, with Vinales in second and Miller taking the final spot on the podium. Silverstone is an old school circuit which almost always throws up fantastic racing on its wide sweeping layout. Bagnaia closed the championship gap to Quartararo on the Yamaha to 49 points, as the Frenchman finished in 8th after serving his, seemingly underserved, long lap penalty.





### **Spielberg**

A couple of weeks after Silverstone the circus gathered in Austria at the fastest track on the calendar for the Cryptodata Motorrad Grand Prix von Osterreich. Spielberg isn't the greatest of tracks in terms of layout, but it usually provides close contests, with Ducati winning almost all the races at the circuit, since racing resumed a few years ago. The stop and go nature of the track is perfectly suited to the Bologna Bullets, which have great acceleration, top speed and braking stability. This year saw a chicane added to the layout of the circuit to bring down the top speeds of the MotoGP machines. Quartararo took maximum advantage of that chicane to eke out every drop of performance from his underpowered Yamaha. Bagnaia eventually took the win, but being pushed all they way to the line by Quartararo. This was Bagnaia's third consecutive win and a first for Ducati since the Casey Stoner era for the Italian factory. Miller took third and increased his run of strong performances as news came through that he will be leaving the team at the end of the season. Quartararo increased his lead in the championship over Espargaro to 32 points, while Bagnaia closed in within 44 points of the leader.

### Misano

The third race after the summer break was back in Italy with the Gran Premio Gryfyn di San Marino e della Riviera di Rimini. Bagnaia has had something of a stranglehold on Misano in the last few visits. 2022 was no different, but by a whisker! This relatively tight and twisty circuit saw the





### **Aragon**

Italian take his fourth consecutive win, a first for Ducati. Compatriot Enea Bastianini finished a super strong second just 0.034 seconds behind. On the last lap he attacked and almost wiped out the race leader. Vinales couldn't keep up with the searing hot pace in the latter half of the race, but continued his strong run of form, finishing on the podium in third. The win saw Bagnaia close down the championship gap to Quartararo to 30 points and move up to second in the championship, with Espargaro falling to third.

From Italy the racing moved to Spain with the Gran Premio Animoca Brands de Aragon. Drama, the word that best described the race weekend. Which started even before the bikes were on track. Marc Marquez was to make his return to the MotoGP class on his Honda, after many months away suffering from multiple injuries. After a successful surgery, he was back to shake up the processional racing. Shake it up he did on the very first lap of the race! He charged through the first couple of corners and almost lost the rear, chopping the





throttle and losing speed suddenly. Quartararo who was directly behind him and much faster had nowhere to go other than into the rear of Marquez' bike. The Frenchman was violently thrown off his motorcycle and taking a beating to his body. The drama didn't end there, as debris from the Yamaha got stuck in his Honda, making him veer off course a few corners later and directly into the path of Takaki Nakagami, forcing the Japanese rider to crash out as well. And this was just the first lap!

For much of the race it seemed like a repeat of Misano, with Bastianini shadowing Bagnaia. On the last lap the 'Beast' made a lunge up the inside to take the lead and defended to the finish line to take the win in glorious

fashion. Ducati management were not amused to see their riders dicing it with so much risk and a championship on the line. Bastianini's win also sewed up the Constructors' Championship for Ducati. The final spot on the podium was taken by Espargaro who pipped KTM's Brad Binder on the penultimate lap. Quartararo's crash, coupled with his championship rivals strong showing, meant that Bagnaia and Espargaro moved in to 10 and 17 points respectively of the Frenchman.

### Motegi

After three long years, MotoGP returned to the home of Honda, Yamaha and Suzuki in Japan for the Motul Grand Prix of Japan. With Suzuki set to leave MotoGP

at the end of this season, it was their last race at home. They would have wanted it to be unforgettable, unfortunately their results were best forgotten with retirements and mechanicals for both their riders.

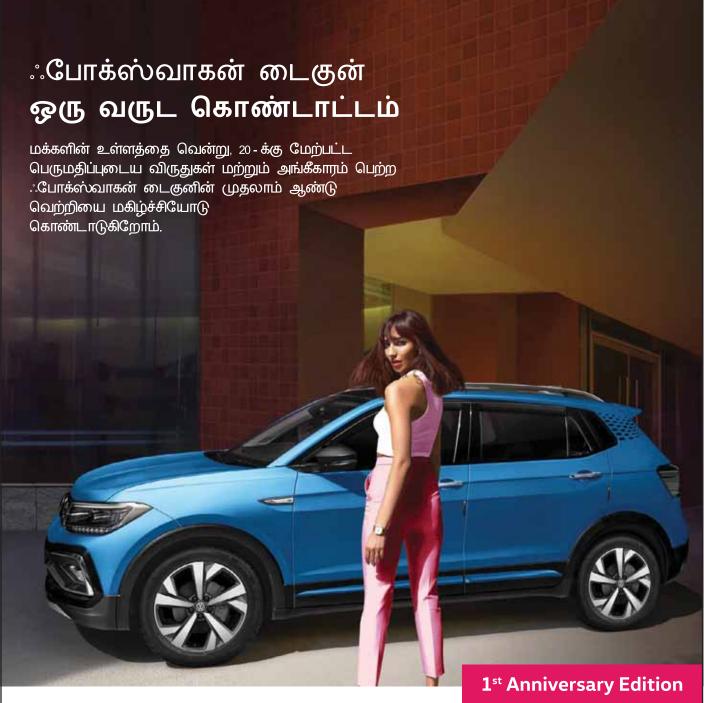
The Motegi race will be remembered for the pole that Marquez took for the first time in 3 years on his Honda in wet and risky conditions. The race itself was topsy turvy, with the championship contenders missing in action at the front. Miller took a comfortable win, with no other rider being able to match his pace. Binder made a last lap lunge down the inside of Jorge Martin's Ducati to seal second place, relegating the latter to third. In a dismal day, Quartararo finished 8th, but the good news for him was that Bagnaia crashed out on the last lap trying to overtake the Frenchman. Espargaro's woes began on the warm up lap, as a mistake from his technicians, who left his bike a sitting duck. He had to start the race from pitlane and never managed to recover enough time and positions to get even a solitary point.

As a result, the race was much ado about nothing in the championship contention, with now Quartararo leading Bagnaia by 18 points and Espargaro by 25 points.

### **The Final Quartet**

With just four races to go in the 2022 championship at Thailand, Australia, Malaysia and Spain, it is all up for grabs, for the top three. Even the tiniest mistake going forward will be punished by the competition. The only guaranteed winners are, we the spectators!





4=VER

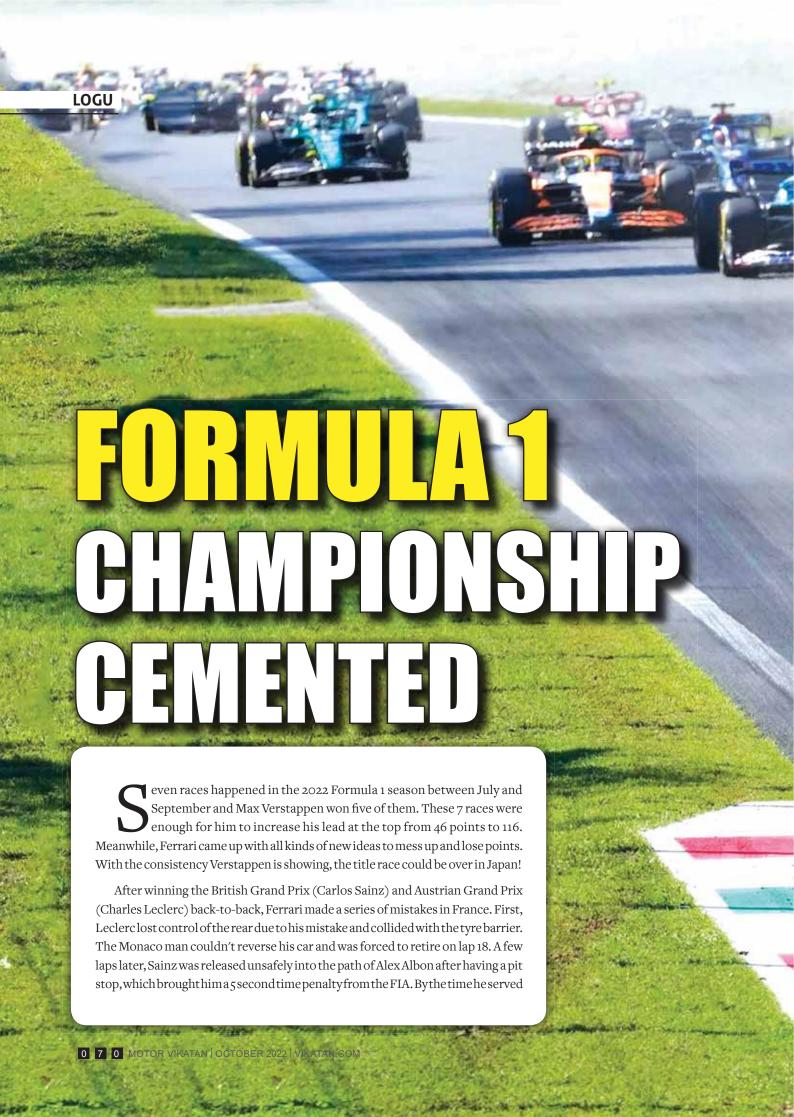
Start a conversation today **(**3 843 395 0909

volkswagen.co.in

Terms and conditions apply. Appearance, features, colours and specifications may differ across variants and are subject to change without prior notice. Dark shade on the glass is due to lighting effect. \*4 Year Standard Warranty, 4 Year Roadside Assistance and 3 Free Services - 1 000 kilometers, 7 500 kilometers and 15 000 kilometers service only labour charges are free. Obey traffic rules. All offers from Volkswagen authorised dealership only. To know more on the schemes, please visit your nearest Volkswagen dealership, or log on to volkswagen.co.in



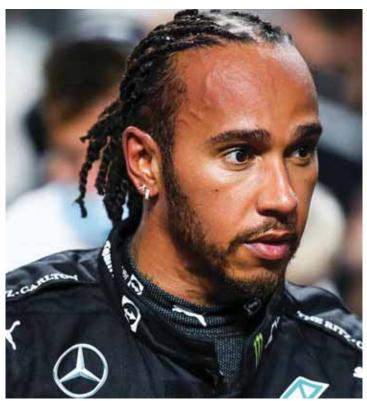
Authorised Dealers: Volkswagen Coimbatore: 9566444442, Volkswagen Digital (Coimbatore): 9500967834, Volkswagen Tirupur: 9952555223, Volkswagen Madurai: 9677444448, Volkswagen Sivakasi: 9500944504, Volkswagen Salem: 9677444446, Volkswagen Hosur: 9629531777, Volkswagen Vellore: 9344721666, Volkswagen Kancheepuram: 9344721666, Volkswagen Trichy: 9500707711, Volkswagen Thanjavur: 9047305777, Volkswagen Erode: 9629833777, Volkswagen Karur: 9629611444, Volkswagen Tirunelveli: 9500967864, Volkswagen Nagercoil: 8489912181







max verstappen



**Lewis Hamilton** 

### 2022 Formula 1 Driver's Championship

1. Max Verstappen	335
2. Charles Leclerc	219
3. Sergio Perez	210
4. George Russell	203
5. Carlos Sainz Jr	187
6. Lewis Hamilton	168
7. Lando Norris	88
8. Estaban Ocon	66
9. Fernando Alonso	59
10. Valtteri Bottas	46
11. Pierre Gasly	22
12. Kevin Magnussen	22
13. Sebastian Vettel	20
14. Daniel Ricciardo	19
15. Mick Scheumacher	12
16. Yuki Tsunoda	11
17. Zhou Guanyu	6
18. Lance Stroll	5
19. Alex Albon	4
20. Nyck de Vries	2
21. Nicholas Latifi	0
22. Nico Hulkenburg	0

### 2022 Formula 1 Team Championship

1. Red Bull	545
2. Ferrari	406
3. Mercedes	371
4. Alpine	125
5. Mclaren	107
6. Alfa Romeo	52
7. Haas	34
8. Alpha Tauri	33
9. Aston Martin	25
10. Williams	6



his penalty in his next pit stop, he slipped almost 5 places, four of which he gained later to finish 5th.

The decisions in Hungary were even worse. They chose to go with a medium tyre for Leclerc's second stint who started with the same tyre type. As the FIA rules demand drivers to use at least 2 different tyre compounds, they had tobring Leclerc for hard tyres. All those drivers who were on the hard struggled clearly, including Fernando Alonso who was a master at bringing out the best of the hard compound tyres. Leclerc who was looking for a victory had to settle for a sixth-place finish. The entire racing community criticized Ferrari for their decision and this is where the Prancing Horse bowed out of the title race.

Ferrari compensated for a drama-less Belgian GP. In the Dutch Grand Prix. first, the left rear tyre wasn't ready when Sainz pitted and they even left the spare wheel gun out which was overrun by Sergio Perez on his way out of the pit. The next pit stop was the flashback of French GP only this time Alonso was in place of Albon. Sainz once again received a 5-second time penalty for unsafe pit release because of which he lost 3 places after the race. Sainz gave an explanation after the race that he had to brake to avoid a collision with a McLaren mechanic and was furious with the FIA ruling. But nothing changed.

Mercedes who showed much improvement in the second phase of the season made a few mistakes of their own. Failure to pit Hamilton in Zandvoort cost the seventime world champion a possible first victory of the season. The Brit couldn't even cruise into the podium places with the old medium tyre against those drivers who changed to softs after a safety car.

# **The Changes:**

Vettel Out: Four-time Formula 1 World Champion Sebastian Vettel announces retirement at the end of the season. After 16 years, 53 race wins and 122 podiums, the German will race for the last time in F1 at Abu Dhabi.

Is Ric taking a break? McLaren and Daniel Ricciardo mutually agreed to terminate the Australian's contract with the team after 2 unsatisfying seasons. Except for Monza 2021, both parties have nothing good to talk about together.

Latifi to be replaced: Last placed Williams announced that Nicholas Latifi will not be part of their roaster for the 2023 World Championship season. Out of the 55 races he started, he scored points in only two of them. One among them is the 2021 Belgian GP for which drivers were awarded 50% of the points as they couldn't race.

Alonso switches again: Vettel's seat inAston Martin will be filled by two-time World Champion Fernando Alonso. The Alpine driver's announcement came as a shock as no one was ready for it, even Alpine!

Alpine or McLaren: Alpine wanted to replace Alonso with Oscar Piastri and announced him as their driver. But Piastri informed that he hasn't signed the contract with Alpine and went on to replace fellow Australian Ricciardo in McLaren.





When every team was finding it difficult to come up with the correct solution or making bad decisions, Red Bull showed immense consistency and keptVerstappenontop.TheirPrincipal Strategy Engineer Hannah Schmitz became a headline after a series of impressive calls she made in these races. Winning races continuously even while starting from 10th, 14th and 7th on the grid, in a span of a few weeks -it's not something an ordinary person could pull off. Even for someone like Max who's insanely confident and comfortable with his car, you need to make the right calls at the right time to pull off something like that. It's great that the racing community is talking about someone who is neither a driver nor a team principal!

Schmitz had to pay the price for becoming a celebrity as she was accused of conspiring with sister team Alpha Tauri in the Dutch Grand Prix. Many complained that Yuki Tsunoda's retirement was orchestrated by Schmitz so that Verstappen would win the race. Alpha Tauri had to defend her by denying the accusation.

With such precise decision-making and brilliant driving from Max, Red Bull is cruising towards the double championship.116 points in the driver's championship and 139 in the team's table are huge leads to lose. When the horse that's chasing is not focused, the Bull needn't worry about the title race. It's already reaching out for it!





# **BOOM CARS**

PRE-OWNED LUXURY CARS

SCAN QR CODE TO FIND US ON SOCIAL MEDIA









CALL: 94999 94888, 85999 85999, 044 42500500

OMR: Kalaignar Karunanidhi Salai, ECR Link Road, Sholinganallur, Chennai - 600 119.

Mount Road: No 7, Pattullos Road, Mount Road, Chennai 600 002 (Near Express Avenue Mall),
boomcarschennai@gmail.com, www.boomcars.in

his winter, feast yourself to a road trip of a lifetime. Enjoy the royalty, culture, traditions, monuments, forts, desert and temples of Rajasthan. The cold months of North India is perfect to visit this state dripping with history.

Rajasthan's topography varies from the Thar Desert in the west, which it is most famous for. But it is also home to the Aravalli Mountain Range, which is the oldest mountain range in India. The state which accounts for 11% of the country's geographical area

has wetlands, plateaus, ravines and wooded regions as well.

Temperatures in the summer will make a road trip extremely unpleasant, which is why touring in the winters is ideal. The route we have planned out for you will take you through the green part of Rajasthan in the east, the Aravallis around Udaipur, the Thar Desert in the west bordering Pakistan and ends back where we start in Jaipur.

## **Getting Started**

How you plan your Rajasthan road trip, depends a lot on where

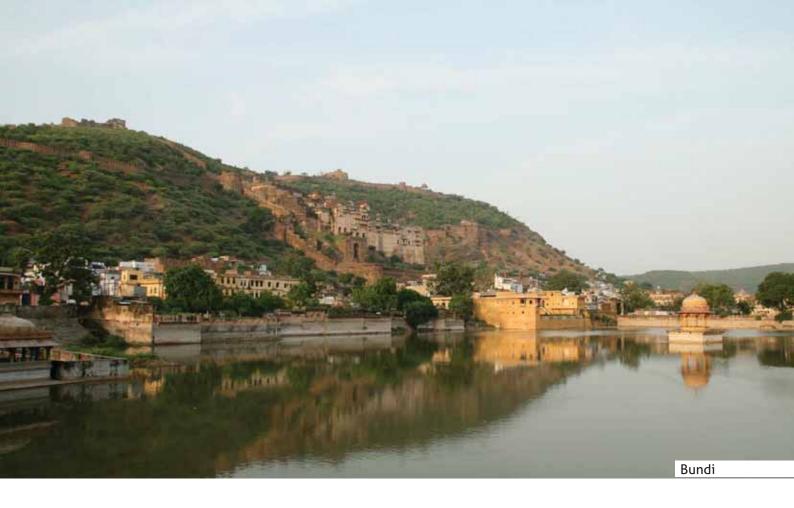
you live. For those residing in neighbouring states, driving down makes a lot of sense. But for those travelling from the south or northeast parts of India, or even abroad, then flying to Jaipur makes more sense.

For those flying in for this road trip, Jaipur has a number of options for renting out self-drive cars and bikes. While that is not quite the same joy as your own machine, but still, it is a worthwhile option.

#### Weather

Winter in Rajasthan is cold. You





need decent warm clothing, as you move around to see the sights. The cold wind which blows across the barren desert can chill you to your bones in quick time. Dress up in layers, so that you can be comfortable throughout the day as the temperature fluctuates.

Temperatures range between low single digits to around 20 degrees in the day during peak winter. There is also fog to be contended with when driving through dawn. Avoid driving in foggy conditions and you will reduce road risk considerably. This translates into reduced number of hours that you can actually spend on the road. Which is an important consideration when planning your start and end times for each day.

Best time to do a road trip in Rajasthan is from October to February. Winter is harshest in January and temperatures can be close to zero in the desert at night.

#### Route

Here's your route which will give you a slice of every version of Rajasthan. You will be covering roughly 2000 km as you see changing landscapes. For the sake of convenience, we have started the circuit in Jaipur, you can tweak it according to the direction you are driving to Rajasthan from.

Jaipur – Bundi – Chittorgarh - Udaipur - Ranakpur - Jodhpur - Barmer - Jaisalmer - Pokhran - Bikaner - Khimsar - Pushkar -Sambhar - Jaipur

#### Jaipur

Capital of the state, there is no better place to kick start this adventure than the Pink City. The city thrives on tourism, so you will easily find all amenities and facilities as an outsider. Jaipur has much to offer, including forts, food, traditional markets, and palaces. These are some of the places we recommend visiting when in Jaipur: Nahargarh Fort, Hawa Mahal, Amer Fort, Jal Mahal, City Palace, Johaari Bazaar, and Chokhi Dhani for traditional food.

As you can see there is a lot for you to do in Jaipur before you start your road trip.

#### Bundi

Your first halt after Jaipur is Bundi, at 214 km, on the eastern part of Rajasthan which borders Madhya Pradesh. As such you will find it to be much greener than what we generally expect Rajasthan to be. On one side you have the Aravalli range and on the other fields of cotton, barley and wheat. While the city itself has numerous fruit orchards.

Bundi, often called the 'City of Stepwells' has a number of them in the old city. There are many attractions in Bundi, but just a casual walk through the 'bluish' old city gives you a brush with bygone eras. Due to its proximity to

the much larger city of Kota, Bundi has stayed relatively rustic and therefore an incredible experience.

In Bundi, you can visit, Raniji ki Baori, Dhabhai Kund, Nagar Sagar Kund, Taragarh Fort and the adjoining Jait Sagar Lake, Garh Palace and Chhatr Palace. A full day's worth of hopping around town!

Udaipur (via Chittorgarh)

Bundi to Udaipur is 265 km with Chittorgarh a little more than the halfway mark. Chittorgarh like most Rajasthani cities has a number of places to visit. But we recommend visiting the centre of attraction, the Chittorgarh Fort. Often referred to as the finest fort of India.

The fort rests on a 180-metrehigh hill and is spread across a mammoth 700 acres. It is steeped in history and battles from the past. Within the fort itself there is a lot to see and absorb and you will end up spending a few hours taking it all in.

After spending much of the day at Chittorgarh you drive onwards to the lake city of Udaipur. Udaipur is the promised oasis in the desert. It is filled with greenery of the Aravallis and lakes in the valleys between all the hills. This city





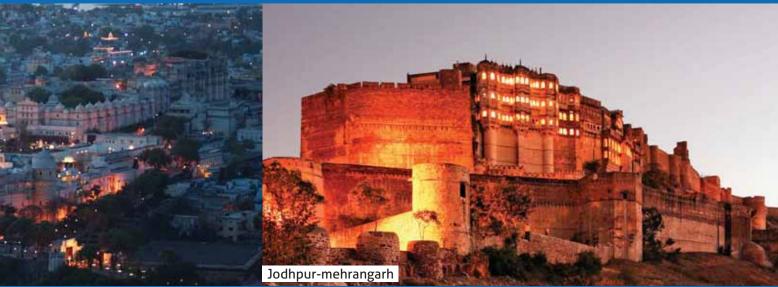
which was founded in 1553 has a number of lakes and palaces for you to visit.

In Udaipur, Lake Palace, Monsoon Palace, Fateh Sagar, Lake Pichola, Udai Sagar, Doodh Talai and Jaisamand Lake are must visit places.

#### Jodhpur (via Ranakpur)

From Udaipur it is a 250 km ride to Jodhpur with Ranakpur around 100 km from your start





point. Ranakpur is the last of the Aravallis you will see and as you drive you will notice the landscapes suddenly changing from green to barren. Such views are best enjoyed from your vehicle.

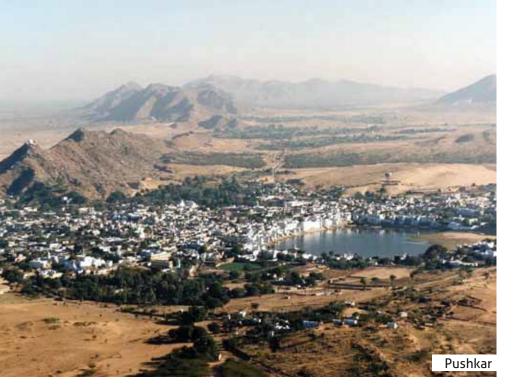
On your route from Udaipur to Jodhpur do stop over to immerse yourself in the splendour of Ranakpur Temple. It is a 15th century Jain temple on the banks of Maghai River. The temple is famous for its 1444 intricately carved pillars, with each pillar unique in its design. After being mesmerised by this structure, which took 50 years to build, you then drive onwards to Jodhpur.

The Blue City of Jodhpur invites you to traditional Rajasthan. Houses, temples, forts, palaces and havelis sport different hues of blue, giving the city its title. The cynosure of the city is Mehrangarh Fort, which towers majestically over its populace. In the fort you can experience the beautiful Moti Mahal, Phool Mahal and Sheesh Mahal. Besides the fort, don't forget to check out Umaid Bhawan and Jaswant Thada which has a museum within. The museum allows you to delve into the past of the land of Marwar.

#### Jaisalmer

From Jodhpur you go northwest to the city of Jaisalmer. We recommend taking the longer route via Barmer which is 330 km, as you will get to enjoy the raw beauty of the Thar Desert in its full glory. Along the way we suggest a quick pitstop near Barmer to check out the Juna Fort and Kiradu Temples, before heading on to Jaisalmer. The extra distance is well worth it.

Jaisalmer is home to the only living fort in India, Sonar Quila, as it is called, it has people living and working there as they did decades





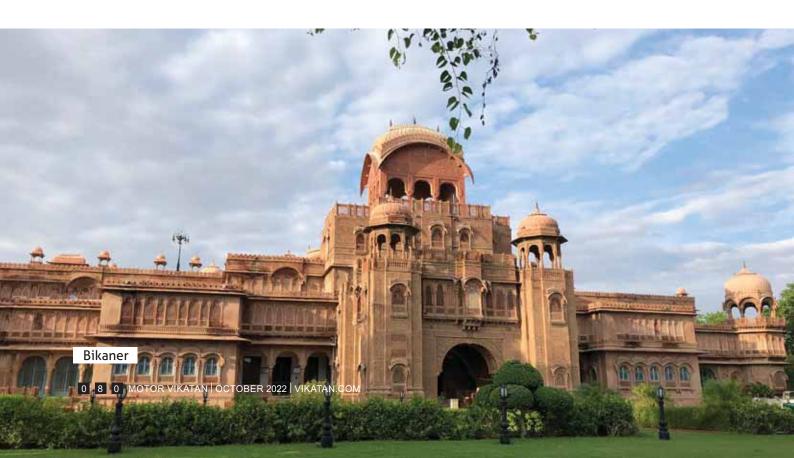
previously. It is a tiny window into the past. Different from other cities of Rajasthan, near Jaisalmer you can visit the Akal Wood Fossil Park, which has fossils from 180 million years ago. A time when this place wasn't an arid desert but a rich forest. You will see this as you drive towards Jaisalmer from Barmer.

Other incredible experiences to be had at are the Desert National Park for desert fauna and the Bada Bagh for its sunset. Don't forget the numerous havelis of the land and if you get a chance, do attend the Light & Sound show at Gadisar Lake.

#### Bikaner

The city of Bikaner is 330 km from Jaisalmer and you will drive past Pokhran. The place where India tested its nuclear missiles underground.

Camel country is the phrase that best describes Bikaner. Here you find the 'National Research Centre on Camel' and also find some of the best camels in this city. The city also has a number of



tourist attractions which are well worth spending time at. Junagarh Fort, Laxmi Niwas Palace, Lalgarh Palace are great places to indulge yourself in the rich culture of northern Rajasthan.

#### Khimsar

Just 150 km from Bikaner is the tiny town of Khimsar. Awaiting you here is an entirely different experience of Rajasthan than you would have had during this road trip.

Khimsar is known for the Khimsar Dunes Village. It is a perfect getaway from the rest of the world! Nestled in the midst of sand dunes, you can stay in one of the many eco-huts. Safaris, camel rides and desert adventures are the perfect experience in these sandy dunes.

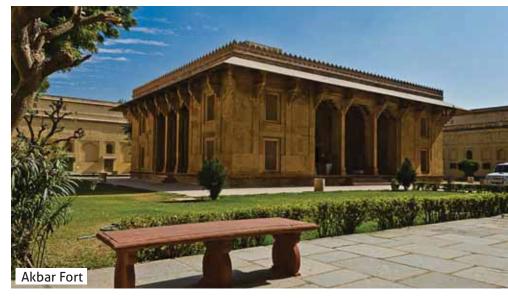
Along the way you can also visit the Nagaur Fort in the neighbouring town of Nagaur.

#### Pushkar/ Ajmer

From Khimsar you go to one of the jewels of Rajasthan, Pushkar, one of the most well-known towns of the state. At just 180 km of driving distance, you will reach Pushkar early enough to explore the town, as well as neighbouring Aimer. Said to be one of the oldest towns of the country, Pushkar is famous for its cattle fair, which sees tourists visiting it from around the world.

If your road trip is timed around the cattle fair, then you will have an incredible experience of Rajasthan in the heart of Pushkar. Even otherwise, you can enjoy the scenic Pushkar Lake and the Brahma Temple, the only temple in the world dedicated to Brahma.





South of Pushkar across the hill range lies the city of Ajmer. Ajmer is home to the Ana Sagar, Ajmer Sharif Dargah and Adhai Din ka Jhonpda.

#### Jaipur (via Sambhar Lake)

Finally, it is time to round up your road trip with a return to the state capital of Jaipur. But not without a detour to Sambhar Lake, a fascinating place for automobile enthusiasts.

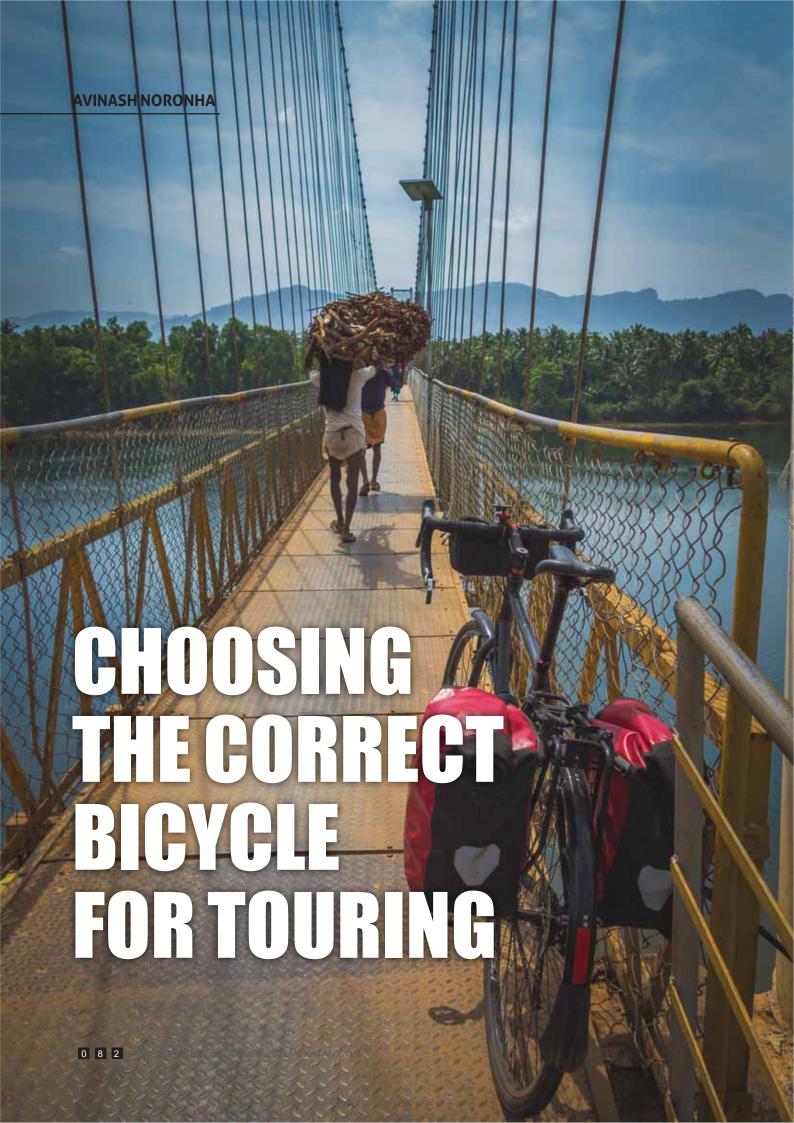
Sambhar Lake is India's largest inland salt lake, akin to the famous Bonneville Salt Flats in the USA, which is used for setting land speed records in a variety of automobiles. Salt has been farmed at this lake for the last 1000 years at least and

currently makes up for around 9% of the country's salt production. The spectacular sight of this salt lake will stay in your mind for years to come, as frankly there is nothing quite as mesmerising as seeing white for miles at a stretch.

After visiting the basic ingredient of food, salt, you then drive back to Jaipur, clocking an easy 170 km for the day.

This 2000 km drive around Rajasthan will take you across, covering every kind of topography, culture, cuisine and architecture of the state. Get your engines revving, it is time to enjoy Rajasthan this winter.







ouring on a bicycle is one of the most satisfying ways to spend a holiday. No other form of travel can show you as much of the world as the humble cycle.

Every other travel style, will see you whizzing through the scenery, missing the finer details of the countryside. On a bicycle your speeds are so low, that you have enough time to enjoy the view, stop to talk to people and become a part of the scenery.

Bicycles are available in a wide variety. There are road bikes, mountain bikes, folding bikes, touring bikes, city bikes to name a few. Within each broad classification, there are multiple sub-categories as well. As a result, it can be quite difficult for someone new to cycling to choose the perfect bicycle for touring. So, here's a guide to help you out.

The type of bicycle you choose for touring depends entirely on the kind of touring you want to do. Which depends on the routes you want to cover.

### **Ultra-light Touring**

A relatively recent phenomenon in the world of cycle touring. This format is loved by strong cyclists, who want to cover large distances at a faster pace and don't want to be burdened by excessive materialism. People carry minimal luggage and plan long distances to be covered every day. The kind of bicycle you choose for such riding depends on the terrain. These tours tend to be shorter, generally limited to a fortnight at most.

If you are planning a full road course, then a good road bike with endurance geometry can take you places. Many riders prefer steel bikes over aluminium or carbon,



because of the sturdiness. But a few years ago, that truism was turned on its head by a rider who rode his carbon road bike around the world. For those planning trail rides and camping, a hard tail mountain bike makes perfect sense. You also get ultra-light camping gear to complement your bike. But it does cost a pretty penny.

#### **BikePacking Setup**

A couple of decades ago, the best way to carry your luggage on your bicycle was with a rack and pannier system. For that you needed a bicycle which could accommodate a rack and preferably fenders as well. With the advent of the bikepacking luggage systems, the world of bicycle touring was revolutionised. You could carry a decent amount of luggage to travel long distances. The best part of the bikepacking setup was that you could use practically any kind of bicycle you

wanted. Whatever you happened to have parked in the garage worked perfectly!

This now gives a lot of flexibility to cyclists in choosing a bicycle. In this case, you tour with whatever bike you own, just buy and strap your luggage on with bikepacking bags.

#### **Full Blown Touring Bikes**

Thanks to the changing world and rider preferences, these bikes are getting limited to few users. Only those looking to spend months touring, get themselves a touring bicycle.

These bikes are generally made of steel, since it is easiest to repair in remote parts of the world. Such bikes will have a nice comfortable geometry, so the rider can be completely relaxed in the saddle. Most of these bikes will come with fender and rack mounts, so that you can install both. The technology on

these bikes is very traditional and has remained largely unchanged in the last 3 decades. These bikes aren't built to go fast or look good, they are meant to be work horses, which don't stand out. Often you will find these bikes built with dynamo hubs so that you can charge batteries and lights while riding. Most people who invest in a touring bike will keep it for many years before even contemplating upgrading the bike.

# Which Bike Should You Choose?

This question can best be answered by what kind of touring are you planning. If you are just getting into touring, we suggest using whatever bicycle you have at your disposal. Try it out and then decide if touring is your thing, only then get a proper touring bicycle.

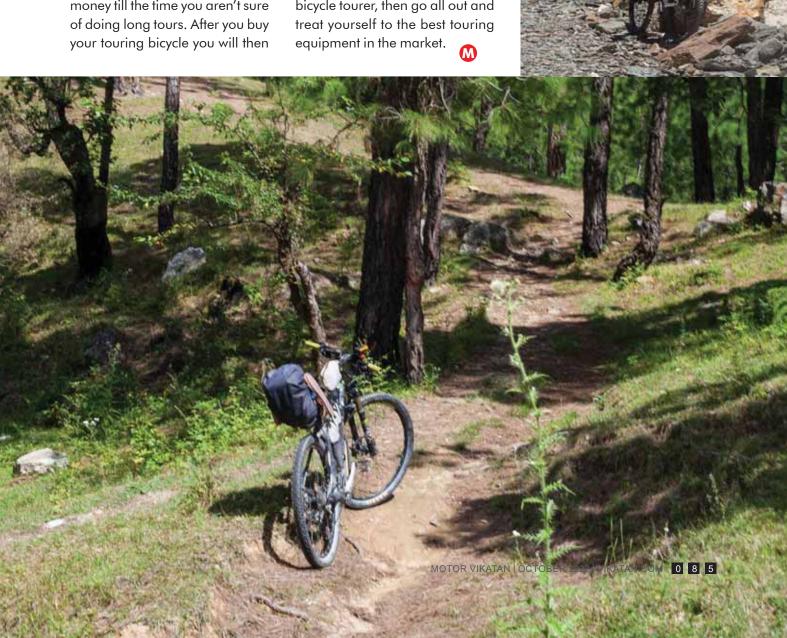
If you do not own any kind of bicycle and are looking to get one



for a tour, then we suggest start simple. Get a decent entry-level hybrid bicycle. This would be decent for shorter duration tours, you will get to understand cycling, maintenance and on-road repairs. Once you have understood the spirit of bicycle touring, you can always look at upgrading.

A basic touring bicycle costs anywhere upwards of 1 lakh rupees. It doesn't make sense for a casual cyclist to invest this money till the time you aren't sure of doing long tours. After you buy your touring bicycle you will then need to buy lights, racks, fenders, bags, touring saddles and more. All of that gradually adds up to a whopping bill! That money is better spent on a long tour with a cheaper bicycle.

To sum up, if you are planning a short tour, use whatever cycle you own. If you are buying a cycle specifically to start touring, first get a decent entry-level hybrid, before splurging. Once you are sure of being a dyed in the wool bicycle tourer, then go all out and treat yourself to the best touring equipment in the market.









Challenges. All focussing on our capabilities to endure.

This story of endurance is not powered by a machine. On the contrary, it is a machine powered by a human. Meet Arun Kumarasamy from Chennai, who recently rode the mammoth London-Edinburgh-London ride in the United Kingdom. He rode the 1540 km distance in an incredibly fast 102 hours and 25 minutes. The time includes breaks and breakdowns! In doing so, he became the fastest Indian to finish this gruelling ride. A ride which sees participation from around the world.

Arun, originally from the beautiful coastal town of Puducherry, is based in Chennai, where he works in the IT industry. This 40-year-old doesn't allow work to stop him from executing

his punishing training schedule every day. All the hours of sweat he puts into training, is what makes him stronger during the event. Irrespective of the heat or rain, you will find Arun rolling down the roads of Chennai, riding as per his coach's instructions.

#### London-Edinburgh-London 2022

For those of you who are unaware, LEL, as it is popularly known, is an endurance bicycle ride which has been conducted every 4 years since 1989. It is one of the toughest endurance rides around the globe. The ride format is different from a race, as you are not competing against fellow riders. You are only competing against the clock, since you have to finish the 1540 km ride in the maximum prescribed time of 125

hours while climbing a whopping 15000 metres.

The 2022 edition had around 1900 participants. With 150 people from India who had flown to the UK. Out of these 150, only 55 managed to finish the ride within the time limit. Among these 55, Arun was the fastest. No mean feat with the quality of riders present. It was all thanks to solid preparation.

#### **Preparing for LEL**

Living in the flat and hot land of Chennai is the opposite of a perfect training ground for UK. The LEL route sees riders dealing with chilly 2 degrees at night and innumerable hills to climb. Training for LEL while being based in this coastal city was a massive challenge. Other than his extreme



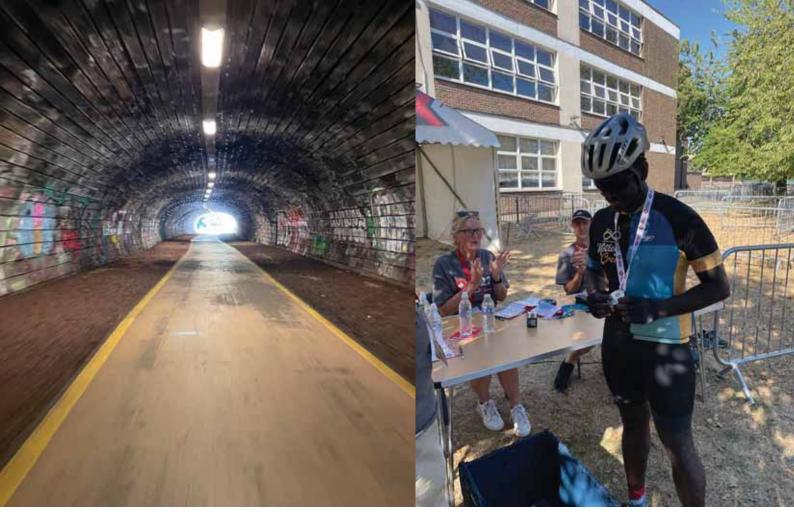
workouts to build cycling fitness, Arun also headed to the hills often. Ooty was a perfect training camp, the climbs and cold of Niligiris making it incredible to acclimatise. Arun also headed out to do many long rides in and around Bangalore. With the constant elevation changes, it greatly helped him tackle all those brutal climbs. Eventually, Arun spent a full year of dedicated training before attempting LEL.

Even then, he says, "Climbing was horrible. Nobody expected that kind of climbing. It was 20-24% gradients for 3-4 km. That was the toughest climb I have ever experienced." Another challenge this year was that England was suffering an incredible heatwave, which saw day temperatures spiralling towards 40 degrees centigrade. The only positive was that it didn't rain a single drop throughout the 5-day ride.

#### The Ride

During the ride, Arun had to stop at all the organiser's control points to get his card





stamped, as well as to grab water and grub. Food was another challenge for most Indian riders. When you are exhausted and have barely slept, you long for home style food. Instead, you have to eat a very different cuisine. It might feel like a small detail, but it all adds up for cyclists who need nutrition. Fortunately for Arun, he is non-veg, so he didn't face as big a challenge as the vegetarian riders from India.

The beautiful countryside saw everyone ride through the day and night. Luckily that high up in the northern hemisphere there is a lot of daylight in summer. From 5 in the morning to 10 at night, there was enough light to ride while enjoying the view. Arun paced himself in the first half of the ride. Only at the mid-way point, which he reached in 38 hours, did he target finishing within 100 hours. Butthatwasn't meant to be. He had a mechanical, in which the crank

on his bicycle broke and he had to run helter-skelter to source a new one. Unfortunately, there wasn't a replacement anywhere in the local stores. Eventually a friend removed the crank from his own bicycle and gave it to Arun, thanks to which he could finish the ride. But that mechanical lost him a few hours, which didn't allow him to finish in sub-100 hours. Such is life!

Riding these massive distances isn't just a physical challenge, it is also mental. Most of the ride Arun was solo. It is difficult to sync your speed and rhythm with another rider, as such, you are better off riding alone. You need to dig deep within to find the motivation to ride, when all you want to do is sleep. Arun would get around 2-3 hours of sleep every night for 5 nights. Which is low even if you were sitting at your desk in office, it is ridiculous when you are spending most of your waking hours pedalling a bicycle.

Arun really enjoyed the atmosphere of the place and the friendliness of the people. Everybody was helpful and would go out of their way to assist another rider. Coming from India, where traffic is a nightmare, riding there felt like heaven. Cars wouldn't honk behind a cyclist; they would wait for a clear road and overtake leaving a lot of space between vehicle and bicycle. Road manners is something we are yet to develop in our country.

Arun was using a Scott Addict bicycle for this ride, an all-rounder kind of bicycle. Perfect for the job at hand. This man-machine combination is now the fastest from our country to have ridden this extreme course. We wish Arun all the very best in future rides and setting new records for others to aspire for. May his endurance surpass all odds!