

Test drive review: Force Gurkha Xtreme 4x4

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Before you say it we will — the Force Gurkha has been around for ages. But let us also remind you that the same holds true for the legendary and hugely popular [Mercedes G-Wagen](#), that has only just been subjected to a thorough refresh after continuing in the same shape and form for even longer than the Force Gurkha. Yet the appeal of these 4x4s, hardcore and awesomely capable off-roaders built for the armed forces, remains undiminished. A similar yearning for an era gone by will see an all-new [Land Rover Defender](#) arrive this year, and hopefully spur India's largest manufacturer to commemorate the

imminent retirement of the [Maruti Suzuki Gypsy](#) with the brand-new (yet constructed in the old-school manner) [Suzuki Jimny](#).

It's that enduring appeal for old-school mega-capable off-roaders that has seen the Force Gurkha endure the ravages of time, proliferation of tarmac roads and the burden of voluminous reams of legislation. And now there's a new one, the Force Gurkha Xtreme. Sure, it looks unchanged from the Force [Gurkhas](#) gone by, the most visible change being the reduction in the number of stickers slapped to her flanks (Made For War! E.O.V: Extreme Overland Vehicle! 4x4x4! All gone!) and an increase in the ground clearance. But the changes run deep and the highlights are the new 2.2-litre common-rail Mercedes-tech OM611 diesel engine that hikes power by a whopping 54bhp while the off-road ability is enhanced with the introduction of a live front axle and new transfer case in addition to the two locking differentials.

How does it perform? We headed to the off-road track where the insane [Rain Forest Challenge](#) Force Gurkhas were developed to find out.



THANK THE INDIAN ARMY FOR THE FORCE GURKHA XTREME

There's a lot to thank our armed forces for — and to the list you can now add the Gurkha Xtreme. To meet the Army's requirements for a Light Strike Vehicle, particularly on the power-to-weight front, Force Motors shoe-horned the 2.2-litre OM 611 engine under the ruler-straight bonnet of the Gurkha and, with the 65 percent bump in power, the reconfigured Gurkha was able to sail

through the tests and bag the Army order. With the Army version done and delivered, why not offer it in the civilian version?

The OM 611 replaces the OM 616, also an old Mercedes-Benz engine whose tooling and rights Force Motors purchased lock, stock and four barrels. It takes the power up from 84bhp to 138bhp while torque goes up from 230Nm to 321Nm — and it is the latter that Force Motors' engineers are keen to point out, especially that 321Nm peaks at 1600rpm and stays flat till 2400rpm. Force Motors have also got Bosch to program a crawl mode on the engine management, which we will come to in a bit.

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A word on the engine. This OM 611 engine is from Force Motors' parts bin and until last year powered their range of hugely popular Traveller mini-busses, which now accounts for over 65 per cent of its segment. It's not like Force Motors have the segment all to themselves but the popularity is down to immense reliability of the Mercedes-origin aggregates and also the grunt of the motor that not only makes overtaking them on the highway a pain but is sufficient enough to even pull even the 35-seater version of the Traveller.

Of course the OM 611 in the Gurkha is a far more refined version than what was in the Traveller, and is more closely related to what was installed in the short-lived Force One SUV. Even though this engine is built in India a lot of the components including the liners and the new dual mass flywheel (which, we will come to) are imported. It is mated to the G32 gearbox that has a higher torque capacity and better shift quality — again this is from Force Motors' parts bin but has grinded gears for better refinement compared to the commercial vehicles it is used in. And the final part of the powertrain rejig is the new transfer case from Divgi-Warner, the Indian joint venture of Borg Warner.

LIVE FRONT AXLE ON GURKHA XTREME

Even though the Gurkha Xtreme has been derived from the Army Light Strike Vehicle it is actually a bit more capable and that's because of the rigid front axle that replaces the independent front suspension. Now the IFS vs solid axle debate is endless and truth is the former is always preferred for its better on-road dynamics and ride comfort. For hardcore off-roaders solid axles are non-negotiable, it is why the new Jeep Wrangler continues with solid axles and that's the reason why Force Motors have gone through the effort of engineering a solid front axle for the Gurkha Xtreme.

The live axles with coil springs on all four corners makes the Gurkha Xtreme's specification unique among off-roaders sold in India. The immediate benefit is the ground clearance; with the IFS the arms were the first thing to get caught while off-roading and that's sorted with the solid axle. Also when you're indulging in really extreme off-roading and one side of the solid axle is up in the air the other one is forced down, the added weight giving the wheel that has contact more chance of gaining traction.

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The Gurkha Xtreme also gets a 3-inch body lift kit already in place, which is evident in the increased gap in the wheel arches. There are multiple benefits to this, not only has the ground clearance gone up but now the arches can take tyre upsizes up to 35 inches without any major body modifications, just remove the plastic wheel arch cladding and you're good to go. Also the suspension geometry doesn't go for a toss with larger tyres, maintaining the camber which is critical area for a good off-road mod and ensuring highway driving isn't compromised. And finally Force Motors have beefed up the spec of the front axle and, while made in-house, is now equivalent to the Dana 44 axles on the new Jeep Wrangler. This allows the Gurkha Xtreme to take the load of a heavier mud tyre and I must also mention another benefit of live axles — if you want to go crazy with the tyres you only need to swap the axles for beefier items, with the IFS that's practically impossible.



LESSONS LEARNT FROM THE RAIN FOREST CHALLENGE

Remember the monsters Force Motors built for the Rain Forest Challenge in Goa? Not only has that powertrain migrated to the Gurka Xtreme but the team

that worked on the RFC Gurkhas are also behind the Gurkha Xtreme making it a perfect case of Win on Sunday, Sell on Monday. And we are on the test track where the RFC Gurkhas were developed... time to pop a few brave pills.

It starts with a steep decline that highlights those crucial off-road angles on the Gurkha, something they are happy to share unlike their rivals. Gradeability is 40 degrees while the approach, departure and ramp over angles are 44, 40 and 30 degrees respectively. Ground clearance is 210mm while the full length floor boards are bolted on and when unscrewed increases the departure angle to 42 degrees.

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Nothing, obviously grounds out as we descend and that’s followed by a steep incline that’s nearly 50 degrees at the top. And the surface is loose. This is where power becomes critical; heck it looks way too difficult so I ask Force’s senior engineer Anant Gurav to first demonstrate that the Xtreme can actually do it — I’m not interested in crashing on my first test of 2019. Turns out it can do it with ease, so I jump in behind the wheel, low ratio and the rear diff lock engaged for maximum traction, gas it hard, shift to second and the Xtreme makes the climb with revs and grunt to spare. I’m not exaggerating, this is seriously impressive. The old Gurkha, no way it would have made it. And we did this with standard Yokohama Geolander all-terrain tyres, not the mud tyres we fitted it with to make it look good for these pictures.

Next Anant is keen for me to check out the crawl function. Now the Xtreme does not have any fancy rock, sand, ice, etc modes nor does it have hill descent and other fancy electronic aids. Heck it doesn't even have ABS though that is coming soon (calibrated to deactivate at very low speeds so as not to hamper off-road ability). What the Xtreme does have is a crawl function — get going, feet off the accelerator, brake and clutch, and the Xtreme chugs along at a steady 1000rpm, up the hill, down the hill, all at a steady 2-3kmph. All the driver has to do is steer, the Gurkha moves along at a very, very slow speed giving full confidence and control on extreme terrain. It can even crawl up gradients as steep as 40 degrees in this mode, only requiring heavy gas to tackle the more heavy-duty sections. Doing this requires a dual mass flywheel to damp out the vibrations and stresses of the engine battling extreme terrain.

TWO LOCKING DIFFERENTIALS RETAINED ON THE GURKHA XTREME

Next we try out the water wading which is claimed at 550mm but can go up to 4 feet with the snorkel that is standard fitment. And finally we go to the axle articulation track that puts to use the locking differentials. The diff locks are only required in very extreme situations where one wheel is in the air and so you lock the diff to direct equal torque to both the wheels and ensure all the torque is not wasted away in (uselessly) spinning away the wheel without traction. First to get locked is the rear diff which is enough for most situations and the front diff lock is only used where the Xtreme is nose down into a ditch where only one front wheel has traction and the remaining three are in the air. Yup, the Gurkha can pull through such situation as well! It's important to remember here to disengage the diff lock as soon as the obstacle is cleared as you cannot steer with the diff locks engaged, especially on tarmac. There are big warning signs highlighting this and to prevent drivers from chewing up the front axle the front diff lock is positioned far away, nearly out of reach of

the drivers so that in enthusiasm he doesn't yank the lever and only uses it when absolutely required.

Sumeer Tandon who consulted with Force Motors' engineers on the RFC-spec Gurkhas has also had a hand in development of the Xtreme. "On the first RFC we had major failures", he tells me pointing to the hubs. "The moment we increased power the bolts would shear off". To sort that out the hubs now have a gear and the torque at the wheel is transferred through the gear, not the bolts on the casing, ensuring a very high level of reliability. And the engineers then point out that the axles already have a provision for hub locks. It's all Sumeer's effort to engineer the Gurkha Xtreme to be just right for the burgeoning off-road community, to be a platform for customisation and added off-road cred without ruining the base proposition.

ON THE ROAD?

Good news! That big worry, that the live axles will ruin the ride quality, are unfounded. The ride quality remains almost unchanged from the IFS-equipped Gurkha Xplorer and that means a soft ride that is far more comfortable than any of its rivals — Thar, Gypsy, everything. The soft suspension does mean a fair bit of wallow and bouncing around on bumpy roads and I must also warn you that the nose is heavy so you're better off not trying to jump it and break the suspension or hole the sump. Then again nobody jumps off-rovers, these are not Dakar-spec vehicles.

"The aerodynamics are of a brick wall and 140bhp can only do mild triple digits on the highway but that's sufficient for the Gurkha"

Back to the road and the Gurkha is quite comfortable and, for a change, it doesn't struggle to get to triple digit speeds. The aerodynamics are of a brick wall and 140bhp can only do mild triple digits on the highway but that's sufficient for the Gurkha, after all the highways aren't the end but just the means for getting to the off-road tracks, the real destination! The Gurkha won't tire you out and the hard top makes a big difference to the liveability of the 4x4. The refinement of the engine is also a big step up over the old Gurkha with both engine and transmission noise going down a fair bit.

That said the interiors and the cabin are still very basic and for something that costs Rs 12.99 lakh you will struggle to turn a blind eye to the bare-bones dash and the lack of creature comforts. Bluetooth? The Gurkha doesn't even get a stereo, forget power windows, central locking or even forward facing rear seats. But you do get an air-con and (as optional accessories) a shovel and jerry can for spare fuel — which is all you will need to cross the Thar desert.

THE BEST INDIAN OFF-ROADER?

For sure. In fact the Gurkha itself was terrific off the road but it was no secret that it lacked power. Now with the new engine the Xtreme can tackle all the off-road trails that tested the RFC Gurkha — that is an immense achievement. Fitted with Rs 1.2 lakh worth of optional accessories that you see in these pictures (mainly mud tyres on alloy rims) the Gurkha Xtreme is the best off-road vehicle that you can drive straight out of the showroom and into the jungles.