



# DICOR mantra

Even with the previous 115PS, the Safari yearned for juice. Now Tata has offered a new engine which should make things better. **Rahul Ghosh** checks out the reality.

Photography: Sirish Chandran

**W**ay back in 1998 the Tata Safari, the country's first SUV, might have been at the cutting edge of Indian automotive design and development, but things have moved on since. While the average life span of a design is about six to seven years, the Indian 'Pajero' is now in its ninth year and still clicking respectable sales numbers. In fact last year's Safari output was the highest ever, a clear indication that this ageing warhorse is still alive and kicking.

In 2005 the Safari was given a transplant in form of a 3-litre common rail oil burner along with a couple of well needed cosmetic upgrades. Power output at 115PS was not so much of an issue as refinement was and she desperately needed a more driveable motor. Tata Motors has finally addressed this, replacing the LCV-derived engine with a brand new 2.2-litre DICOR motor to rejuvenate the beast.

## STYLE & DESIGN

*Old bottle, new cork...*

Nine years is a long time so it's surprising how the huge SUV still manages to look contemporary. While the basic shape has remained unchanged, every successive face-lift has focused on sharpening her nose and rounding off the tail. In the latest go-round the Safari gets a new grille and skid plate at the front and a new spare wheel cover and tail lamp at the rear. The butch and macho visage that in essence embodies the core appeal of the Safari has been retained.

The fit and finish aspect hasn't been paid much attention to however. Door handles are less than easy to use, the doors need muscular shove for them to shut, yawning gaps between panels and the visible adhesive used to stick footboard rubber panels tell the story. The Safari's paint work is top notch however with customary wash being all that it takes to get her a gleam.

The large bucket seat up front is comfy.

The large seat squab is inviting with splendid support for the back. The height adjustable driver's seat is handy for driver to set ideal driving position. The rather plasticky steering wheel has very limited rake adjust. With just odo and speedo and fuel gauge and temperature gauge integrated within the large instrument binnacle looks spartan. The small rotary dial to activate four-wheel-drive is more akin head lamp beam adjust knob. A more macho unit placed prominently would be a big improvement.

The pseudo wood centre console now gets two-tone beige finish. The design is unchanged, with an array of switches for fog lamps, fuel lid opener et al. The ashtray, lighter and music system are obstructed by the gear shifter. Another irritant is the hard to locate key fob. The dismal quality levels seem out of sync for an expensive SUV.

Storage space abounds on the centre console and the deep door pockets. The Safari is endowed with a reversing camera that projects images on to the right corner of the mirror. But the camera images can be deceptive; the fish eye lens above the rear number plate provides little perspective of proximity to obstacles. Parking sensors would work much better even while accounting for the bulge of the spare.

At the rear, passengers are pampered with 910mm of knee room in tandem with generous head room and large comfortable seats. Individual LCD screens raise the entertainment quotient while the central arm rest furnishes a drink holder. The roomy boot offers cavernous loading space. Twin jump seats add to the accommodation tally.

The Safari seems to have more air-vents than a multiplex so chill downs happen in super quick mode. The top end version also gets twin airbags up front and ABS adding to the Safari safety quotient, the first Indian SUV to be subjected to a full frontal crash test.

**STYLE  
DESIGN**



That's what the fuss is about, a new 2.2-litre VTT DICOR with 140PS and 320Nm of torque.

## CHASSIS & SUSPENSION

*Minor changes to take into account the lighter engine...*

The Safari continues with the body on ladder frame set-up, which keeps cost in check, while also ensuring the rugged off-roading capabilities appropriate for big butch SUV.

Up front the Safari is endowed with double wishbones with anti roll bars and torsion bars. At the rear coil springs coupled to hydraulic shock absorbers and anti roll bars do duty. With her massive 235/70 R16 Dueller tubeless tyres the Safari handles broken stretches with aplomb much to the joy of the passengers. Ride quality truly is a Safari forte and she is hard to beat in context of long distance mile munching.

Cornering is not a virtue given the Safari's tall stance, in fact it could feel nervy. However the anti-roll bars do keep things in check on body roll count. She tends to understeer heavily or, if so provoked, steps out at the rear. Definitely not recommended. Ground clearance at a massive 205mm makes sure there's nothing to fear from urban craters and holes.

**CHASSIS**



**SUSPENSION**



## ENGINE & TRANSMISSION

*Far better but not the best...*

The Safari had an engine swap two years ago, in form of the 3.0-litre engine from the 407 light truck albeit with revisions and common-rail injection. However it was low on refinement with driveability bordering on the atrocious. In fact Tata Motors reinstated the old 2.0-litre turbo-charged diesel unit in response to customer demand. However that was never going to work in the long run, especially with the prescribed emissions compliance. Voila, enter the new 2.2-litre VVT DICOR.

This direct injection common-rail motor displaces 2179cc and churns out 140PS of power at 4000rpm and torque of 320Nm in the 1700-2700rpm band. The engine has been designed with inputs from AVL of Austria while the fuel injection system has been developed jointly with Delphi.

Aluminium has been used in the cylinder head to keep check on weight and spherical skirts have been used for improved stiffness. Injectors are now vertically positioned to ensure better swirl in the chamber for better combustion which in turn enables better performance and economy. Glow plugs are now ECU controlled and make for quicker cold start ups.



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The Safari engine is mated to a 5-speed manual transmission with revised ratios to take care of the stronger torque curve. However shifts are as vague and rubbery as before with long throws and not much precision to the shift action.

As before the Borg & Warner 4WD transfer box is offered as an option with shift-on-





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1. Superb leg room and head room, good air-con and individual LCD screens make the Safari rear seats a cool place to hang out in. 2. Yes, look carefully and you can see Ashish in there, the benefit of the reversing camera. But beware it doesn't put spare wheel in the view. 3. Plastics are dissonant with the hefty price tag. Gear shifter obstructs stereo, ash tray and lighter. Note the teeny 4WD transfer switch left of the steering.

the-fly four-wheel-drive. Four-low is a boon in sticky situations but with the size and weight of the Safari things are better on tarmac rather than off it.

**ENGINE** ★★☆☆○

**TRANSMISSION** ★★☆☆○

## PERFORMANCE

*Still not a rubber burner...*

The Safari is no burn-out champion but exudes mile munching virtues instead. Fire up the engine and the initial diesel clatter subsides once the engine warms up. Shift into first, let go the clutch and the two-ton behemoth gets moving at its own sweet pace as the revs rise up. Noise and vibration levels at high revs are more intrusive than desirable. But she does get up to speed quickly enough, a 0-100kmph time of 16.61 seconds and top speed of 153.3kmph proving this mammoth is more than fleet enough.

Thanks to the mammoth 320Nm of twist, power is available above the 1500rpm band in all gears. In fact she will comfortably potter around in-city in fourth gear provided the revs are kept above 1500rpm. This marks a huge improvement and a welcome addition to the Safari repertoire. However the not very interesting aspect remains to be the roll on times. In 4th she took 16.39 seconds to get to 100kmph from 40 and in fifth she managed it in 27.32 seconds.

In terms of refinement, the Tata DICOR engine still has a long way to go and large scope for improvement. Compared to other common-rail engines, it feels crude and crass. Three-point turns are a veritable nightmare

in the Safari, her large 6-metre turning circle necessitating a look-before-you-U-turn precaution on crowded city streets. The steering wheel gets a bit heavy at low speed, a definite no-no.

Where the new Safari has bettered her predecessor is in fuel economy. In city she returned 12.23kmpl with the air-con on while on the highway she returned a lavish 17.99kmpl. That makes for 13.67kmpl overall. With a 65-litre tank she has a range of 889km on tankful.

The Safari uses 302mm ventilated discs up front and 295mm drums at the rear, with the entire braking system being given a working over to handle her enhanced capabilities. The ABS works well and she held on to a straight line in our brake tests. She comes to dead halt from 100kmph in 3.27seconds using up 50.32 metres of black top, still less

than desirable but definitely better than before.

**PERFORMANCE** ★★☆☆○

## SUMMING IT UP

The top of the line version we tested comes fully loaded with split air-con, Blaupunkt DVD player with LCD screens integrated into the front head rests, leather seats, reversing camera and the 4WD option. It adds up to Rs 12.44 lakh on-road in Pune, a price tag that brings into the picture the Ford Endeavour and the soon-to-be-launched Chevrolet Captiva. At this price image counts - which the Safari is imbued with - but factors like quality, refinement and on-road dynamics play a huge role and it's here that the Safari needs some working on. And working on it is Tata Motors. A new Safari by next year? Don't bet against it. ☹

**1998** Safari launched with 90PS turbo-diesel motor. **2001** Safari in new EX variant. **2003** Limited edition gets Playstation & VCD player. **2005** Safai with 3.0 DICOR engine. **2007** Safari 2.2 VTT DICOR.



TATA Safari: the 'Indian Papero'

Road Test No. 610

Tata **SAFARI** 2.2 VTT DICOR



www.tatamotors.com

**OVERALL RATING**



Price as tested  
**Rs 12.43 LAKH,**  
on road Pune, approx.

**0-100KMPH** 16.61s  
**0-400M** 15.48s  
**TOP SPEED** 153.3kmph

**RIDE** V Good  
**HANDLING** Average  
**BRAKING** Average

**SPECIFICATIONS**

**ENGINE**

Type	2.2 VTT DICOR
Made of	Aluminium alloy head
Cylinders	4
Installation	Transverse
Valvetrain	16 Valve
Displacement	2179
Bore x Stroke	85mmX96mm
Comp Ratio	17.2:1
Max Power	140PS@4000rpm
Max Torque	320Nm@1700-3200rpm
Max engine speed	4500rpm
PS/Litre	63PS/litre
Power/Weight	64.51PS/ton
Fuel	diesel

**DRIVETRAIN**

Transmission	5-speed manual
Final Drive Ratio	4.1
Reverse Gear Ratio	3.75
Rpm@90kmph in 4th	2662

**CHASSIS & BODY**

GEAR	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	RATIO	OVERALL RATIO	OVERALL RATIO	KMPH/1000RPM
						4.10	16.81	16.81	8.25
						2.22	9.10	9.10	15.23
						1.37	5.61	5.61	24.43
						1.00	4.10	4.10	33.81
						0.77	3.157	3.157	39.27

Layout	Ladder type
Body/Frame	body on ladder frame
Brakes Front	302mm ventilated discs, ABS
Rear	295mm drums
Assist Type	NA
Wheels	6.5J X 16, alloys
Tyres	235/70 R16 tubeless
Steering	Power
Overall ratio	18.9:1
Turns lock to lock	2.7
Turning circle dia	6m

**SUSPENSION**

Front	Double wishbone, torsion bars.
Rear	Coil springs anti roll bar

**MAINTENANCE**

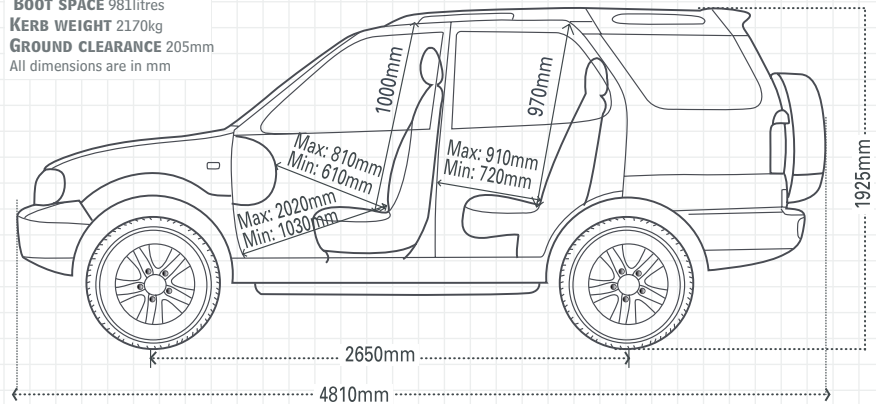
Oil/Filter Change	15000
Basic Warranty	2 years/ 75000km which ever earlier

**INSTRUMENTATION & EQUIPMENT**

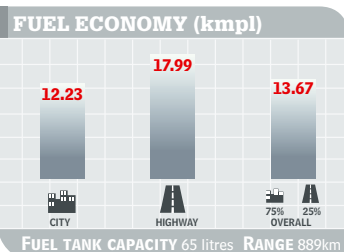
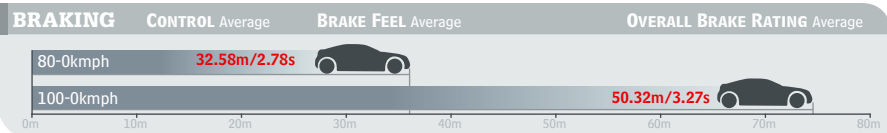
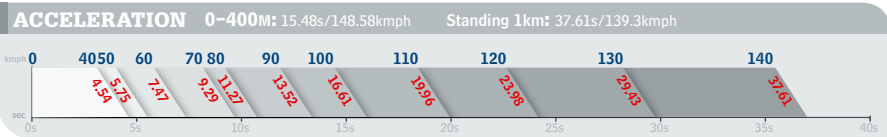
Tachometer, tripmeter, door ajar/ seatbelt warning, adjustable steering, power windows, dual air-con, driver and passenger SRS airbags, ABS, immobiliser, central locking, alloy wheels, power mirrors, fog lamps, rear wash and wipe, music system, Blaupunkt DVD player, twin LCD screens in front headrests, reversing camera, Borg & Warner shift-on-the-fly 4WD.

**GENERAL DATA**

**SEATING CAPACITY** 7  
**SHOULDER SPACE** 1480mm  
**BOOT SPACE** 981litres  
**KERB WEIGHT** 2170kg  
**GROUND CLEARANCE** 205mm  
All dimensions are in mm



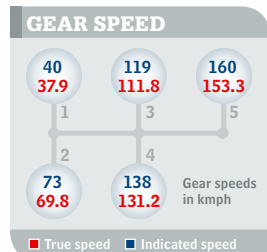
**PERFORMANCE**



**ROLL ON**

Kmph	4	5
40-50	3.71s	7.15s
50-60	2.62s	5.22s
60-70	2.34s	3.99s
70-80	2.42s	3.45s
80-90	2.57s	3.58s
90-100	2.73s	3.93s

20-80KMPH IN 3RD 56.26s



**TESTER'S RATINGS**

Design & Style	★★★★○○
Powertrain	★★★★○○
Performance	★★★★○○
Fuel efficiency	★★★★○○
Dynamic ability	★★★★○○
Space	★★★★○○
Creature comforts	★★★★○○
Driver appeal	★★★★○○
Safety	★★★★○○
Interiors	★★★★○○
Suspension	★★★★○○
Ride quality	★★★★○○
Handling	★★★★○○
Steering	★★★★○○
Braking	★★★★○○

**TESTER'S NOTES**



The new 2.2 engine has to some extent gifted a little more life to the Safari. It's definitely better than its previous avatar, especially in terms of mileage. Gear shift remains notchy. Ride is good and the AC fantastic. Only if Tata could rejuvenate the dated looks.

**SECOND OPINION**



Ride quality was always the Safari's forte and this variant doesn't disappoint, being an excellent mile muncher. The new engine is also a massive improvement though in this day and age it's just about average. In terms of fit and finish and dynamic ability her age is showing.