

A Review on Bolero V/S Scorpio

Manpreet singh, Pardeep kumar

Students, Automobile engineering (4th YEAR), Chandigarh University, Gharuan,
Sas nagar, Mohali, India

Submitted: 01-05-2021

Revised: 10-05-2021

Accepted: 12-05-2021

ABSTRACT: This Article shows a difference between SUV Mahindra scorpio and Mahindra bolero. As we think there is very little difference between these two SUV automobiles. These two automobiles having a carrying capacity between 5 to 9 passengers at a time. Major difference between these automobiles are by front and rear suspensions, engine, power, torque, steering type, front brakes etc. but there are also minor differences such as dimension (length, width, height, wheel base, ground clearance, Kerb weight(mm)), minimum turning radius(meters), mileage (ARAI)(KMPL) etc.

GENERAL TERMS: To show difference between scorpio and bolero

I. INTRODUCTION

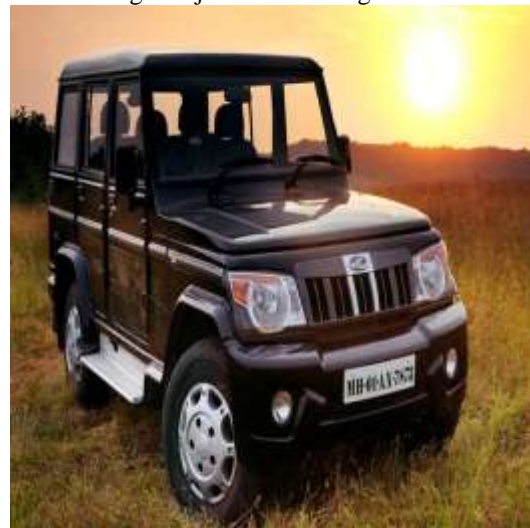
In this automobile world the customer must know the difference between the Mahindra and Mahindra's automobile so that the customer can buy the best automobile according to the usage and need which can help the customer to fulfill his necessity. Mahindra has created a wide range of automobile model from a single model beginning .it has covered about 70% shares of market .As Mahindra had succeeded in the fulfillment of the need of customer by making different automobile.

FEATURES BETWEEN SCORPIO (S9 2WD 8 STR) AND BOLERO (ZLX BS IV)

BOLERO M2DICR ENGINE

1. This m2DICR is the old faculty engine from Mahindra.
2. The engine become a small upgrade (common railed on DI) on their older DI engine borrowed from Peugeot.
3. The engine has a unmarried overhead cam with two valves inline with cylinder.
4. The engine is 2.5L (2500cc) engine which deliver 63 hp around 3200 RPM and 180Nm @ 1440rpm.
5. The engine has Turbocharger without variable nozzle turbocharger.

6. The engine has an intercooler for the turbocharger adjacent to the engine radiator.



SCORPIO Mhawk ENGINE

1. Mhawk engine is cutting-edge gen engine from Mahindra which is the downsized model of m2dicr.
2. It has a 2.2liter (2200cc)engine turning in magnificence overall performance of 140bhp @ 3750 rpm and 330 Nm @ 2800 Rpm.
3. The turbo is a VGT faster with overhead intercooler (the intercooler is placed within the engine head to keep away from pumping loses).
4. The engine makes use of twin overhead cams with 4 valves consistent with cylinder and the engine is likewise much less in weight.

So the mhawk engine is technically correct because it gives the high-quality performance as a downsized engine. The m2dicr engines can be discovered in boleros they are nonetheless used due to its gas efficiency of 15 KMPL primarily based on ARAI.



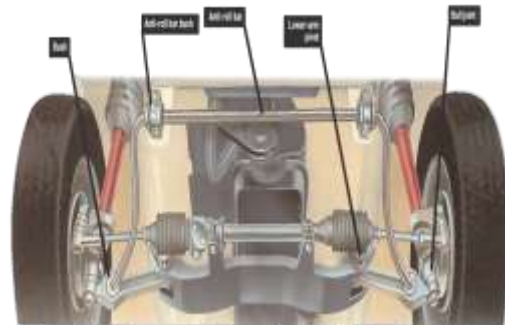
the seating capacity (person) of bolero is about 7 person but scorpio is having a capacity of 7 to 9 person.

COMMON FEATURES

Ac, power steering, power windows , central locking by key.

FRONT AND REAR SUSPENSION

front suspension used in bolero is INDEPENDENT WITH COIL SPRING & ANTI ROLL BAR.



front suspension used in scorpio is DOUBLE WISH-BONE TYPE ,INDEPENDENT FRONT COIL SPRINGS.



TRANSMISSION

Bolero has 5 gears-manual transmission and scorpio has 6 gears-manual transmission.

DIMENSIONS

Bolero is having a length of 4107mm, width 1745mm, height 1880mm and wheelbase 2680mm.

Scorpio is having a length of 4456mm, width 1820mm, height 1995mm, and wheelbase 2680mm Ground clearance of bolero is 180mm but scorpio's ground clearance is not available.

WEIGHT.

Kerb weight (kg) of bolero is 1615 kg but scorpio's kerb weight is not available.

Boot space (liters) of bolero is 550 liters and boot space of scorpio is not available.

POWER TO WEIGHT RATIO

Power to weight ratio (PS/ton):Bolero Power +-44, scorpio-66 (Difference 50percent)

TORQUE TO WEIGHT RATIO

Torque to weight ratio(NM/ton):Bolero Power+-121, scorpio—154(Difference 27percent)

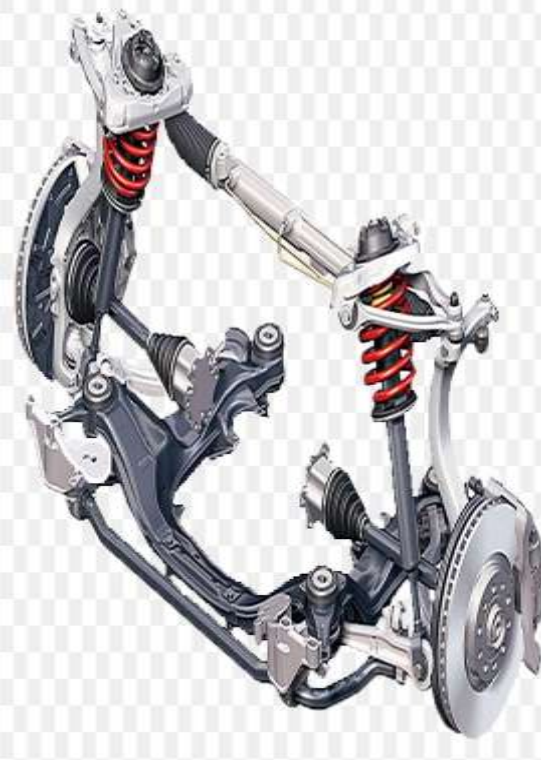


Rear suspension used in bolero is ELLIPTICAL LEAF SPRINGS.

CAPACITY



Rear suspension used in scorio is MULTI-LINK COIL SPRINGS SUSPENSION WITH ANTI-ROLL BAR.



POWER (Ps@rpm)

Bolero power+ -71.4@3600 , scorio – 120@4000

TORQUE NM@rpm)

usBolero power+ -195@2200 , scorio – 280@1800- 2800

KERB WEIGHT (kg)

usBolero power+ -1615 , scorio -1820

FRONT AND REAR BREAKS

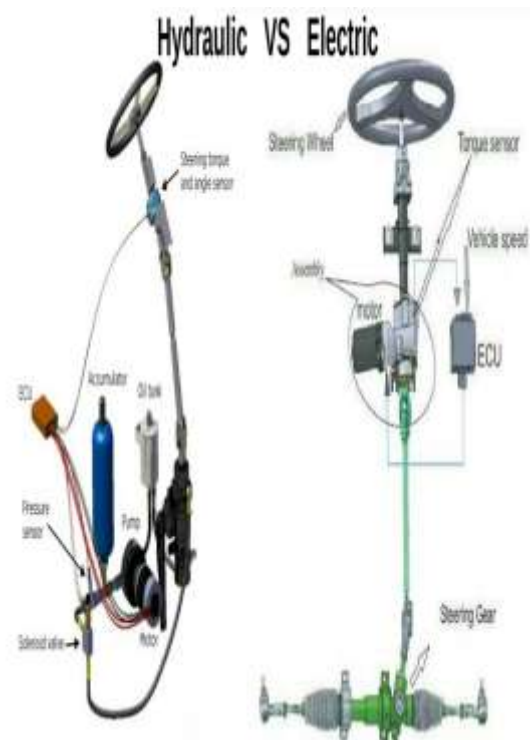
Front and rear brakes used in bolero is DIC and DRUM brakes.

Front an rear brakes used in scorio is VENTILATED DISC and DRUM brakes.

STEERING SYSTEM

Steering system used in bolero is POWER ASSISTED (ELECTRIC).

Steering system used in scorio is POWER ASSISTED (HYDRAULIC).



PERFORMANCE & DRIVABILITY :

In terms of power-to-weight-ratio, the so-called bolero power plus is actually one of the least powerful cars in India. On paper, the latest 1.5-liter engine appears to be an improvement over the previous one, but in practise, it lacks the 2500cc mill's effortless drivability. The Scorpio, on the other hand, feels like a welcome update, thanks to its 2.2-liter mHawk engine. The level of performance is extremely high.

ARAI MILEAGE (KMPL):

Bolero power+-16.5

Scorio(manual)-15.4 (difference 1.1)

FFUEL COST FOR 75,000KM(In Lakh):

Bolero power+-3.40
Scorpio (manual)-3.90

MINIMUM TURNING RADIUS

Minimum turning radius of bolero is 5.8 meters.
Minimum turning radius of scorpio is 5.4 meters.

TYRES

Front and rear tyres size of bolero is 215 / 75 R16.
Front and rear tyres size of scorpio is 235 / 65 R17.

USES AND PREFERANCE

Bolero is gernally used for heavy purposes and mountain roads.

Where the scorpio is used for commercial and smooth roads.

II. CONCLUSION

The customer is now able to differentiate between the Mahindra bolero and Mahindra scorpio so that the customer can buy the best automobile according to the need. We have given a lot of different features between these two automobile how these both are different from each other. one can choose the bolero if needed for transportation of goods or mountain area and the other can choose the scorpio for smooth road.
[9].

REFERENCES

- [1]. <https://www.carwale.com/comparecars/mahindra-scorpio-vs-mahindra-bolero/?c1=6021&c2=2257&source=26>
- [2]. <https://www.zigwheels.com/compare-cars/mahindra-bolero-power-plus-vs-mahindra-scorpio>
- [3]. <https://www.quora.com/What-is-the-difference-between-mHawk-and-m2DICR-engines-offered-by-Mahindra#>
- [4]. [https://www.carwale.com/mahindra-cars/scorpio/?utm_source=bing&utm_medium=cpc&utm_term=&utm_content=_____c__\[notmobile\]_0_none&utm_campaign=&msclkid=ccb25f2420541aac5873017e8587b9cf](https://www.carwale.com/mahindra-cars/scorpio/?utm_source=bing&utm_medium=cpc&utm_term=&utm_content=_____c__[notmobile]_0_none&utm_campaign=&msclkid=ccb25f2420541aac5873017e8587b9cf)
- [5]. <https://www.group1mahindra.co.za/blog/mahindra-bolero-vs-mahindra-pik-up/>
- [6]. <http://www.vicky.in/comparison/mahindra-bolero-vs-mahindra-scorpio/>
- [7]. <http://www.vicky.in/comparison/mahindra-bolero+di-vs-mahindra-scorpio+s3-2wd-vs-mahindra-bolero+zlx-bs-iv/>
- [8]. <http://www.vicky.in/comparison/mahindra-bolero+zlx-bs-iv-vs-mahindra-bolero+di-vs-mahindra-scorpio+s3-2wd-vs-mahindra-scorpio+s11-4wd/>