Foreword

BOXER EN 150 EN 150

Dear Customer,

Congratulations on choosing "Boxer BM 150" motorcycle, one of the finest motorcycles in the country brought to you by Bajaj Auto Limited.

Before you prepare for riding, please read this User's Guide carefully to familiarize yourself with the mechanism and the controls of the vehicle.

To maintain your bike in perfect running condition to deliver consistent performance, we earnestly advise you to avail periodic services, at Bajaj Dealers.

You can entrust Bajaj Dealers, who are well equipped with all necessary facilities, skill sets and trained manpower for servicing and repairs of your "Boxer BM 150". In the rare event of going to a local garage, always insist on Genuine Bajaj Spares to ensure safety, performance and longer life of your vehicle.

Should you require any additional information, please approach Bajaj Dealers. If necessary, you may also write to selling dealers, with relevant details like Registration no. Chassis no., Engine no., Date of purchase, Kms. run, name of selling dealer and your contact numbers.

Finally, may we request you to give your motorcycle a proper care and regular maintenance, as described in this manual. We are sure this will offer you a long trouble-free ownership experience. Wishing you unlimited miles of happiness!

DOC. NO. 71111331 REV. 00, JAN. 2016 International Marketing BAJAJ AUTO LIMITED Akurdi Pune - 411 035 India

BOXER EM 150 EM 150

Description			
1. Technical Specifications	1	7. Periodic Maintenance Information	20
2. Location of Parts	3	8. Periodic Maintenance & Lub. Chart	25
3. How to Ride Bike	14	11. Non-use Maintenance	28
4. Running In	16		
5. Safe Riding Tips	18		
6. Daily Safety Checks	19		,

Safety and Warning information :

- Warning : This indicates that a potential hazard or injury to you or other persons & to the vehicle can happen if advice provided is not followed
- Caution : This indicates that a potential hazard that could result in vehicle damage. Follow the Advice provided with the caution.

Notice: The description and illustration in this booklet are not to be taken as binding on the manufacturers. The essential features of the type described and illustrated herein remaining unaltered. Bajaj Auto Limited reserves the right to carry out modifications on the vehicle, parts or accessories as may be convenient and necessary at any moment without being obliged to bring this booklet upto-date.

		MADE OTHOROER TO EAST EDROER	
Engine	: 4 stroke, single cylinder	Front Brake	:
	Natural air cooled,		
	Spark ignition	Rear Brake	:
Bore x Stroke	: 56.0 mm x 58.8 mm	Fuel Tank Capacity	
Eng. Displacement	: 144.8 cc	Full	:
Compression Ratio	: 9.8 <u>+</u> 0.5 : 1	Reserve	:
Idling Speed	: 1400 rpm ± 100	Usable	:
Max. Net Power	: 12 PS @ 7500 rpm	Dimensions	:
Max. Net Torque	: 12.3 Nm @ 5500 rpm	Length	:
Ignition System	: AC, Digital CDI with TRICS	Width	:
		Height	:
Spark Plug (1 Nos)	: CHAMPION PRZ9HC or BOSCH UR4AC	Wheel base	:
Spark Plug Gap	: 0.7~0.8 mm	Ground clearance	:
Lubrication	: Wet sump, Forced.	Turning circle radius	:
Transmission	:4 speed constant mesh.		

Technical Specifications

BOXER BM 150 BM 150X

11 liters2.5 liters1 liters

2016 mm

760 mm

1028 mm

1285 mm

190 mm

2050 mm

Mech. expanding shoe 130 mm dia. Drum Mech. expanding shoe 130 mm dia. Drum

Technical Specifications

Tyre Size

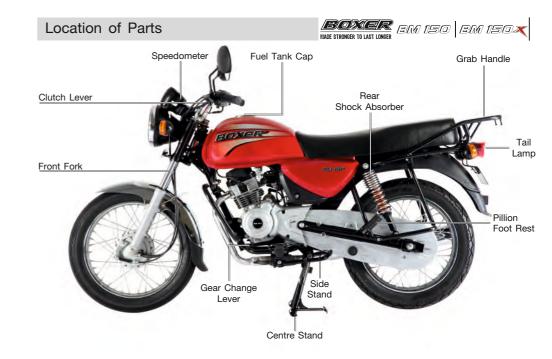
Front	:	3.00 X 17", 45 P
Rear	:	100/90 X 17", 55 P
For BM 150X		
Front : 3.00 X 17"	Semi	Knobby Type
Rear : 3.00 X 17"	Semi	Knobby Type

Tyre Pressure

Front	:	1.75 kg/cm ² (25 PSI)
Rear (Solo)	:	2.00 kg/cm ² (28 PSI)
Rear (Pillion)	:	2.25 kg/cm ² (32 PSI)
Electrical System	:	12 Volts (AC/DC)
Head Lamp		
(w/o Pilot lamp)	:	35/35W HS1
Neutral	:	12V, 2W
Tail / Stop Lamp	:	12V, 5/21W
Turn Signal Indicator	:	12, 2W
Side indicator Lamp	:	12V, 10W (4nos clear bulb)

BOXCER B	m 150 BM 150×
Hi Beam Indi. Lamp	: 12V, 2W
Speedometer Lamp	: 12V, 2W
Fuel Meter lamp	: 12V, 2W
Horn	: 12 V DC
Battery	: 12 V 5 Ah MF

Vehicle Kerb Weight	:	122 kg.
Gross Vehicle Weight	:	252 kg.
Max. Speed	:	100 km/hr. (With single rider 68kg)
Climbing Ability	:	25% max. (14°)
Note : All dimensions condition. Above infol change without any notic	rm	nation is subject to



Identification Data

BOXER EM 150 EM 150×

The Frame and Engine serial numbers are used to register the motorcycle. They are the unique alpha-numeric codes to identify your particular vehicle from others of the same model and type.

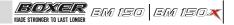


Engine Number Location On LH Side Crankcase Near Gear Change Lever (Alpha-Numeric - 11 Digits)

Frame Number Location On LH Side of Steering Tube (Alpha-Numeric - 17 Digits)



Location of Parts





Steering cum Ignition Lock : It has three positions.

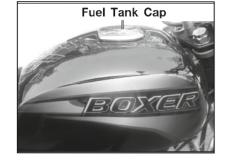
	LOCK	: Steering	locked.	Ignition	OFF.
0	OFF	: Steering	unlock.	Ignition	OFF.
0	ON	: Steering	unlock.	Ignition	ON.

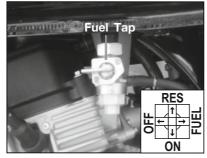
To Lock the Steering : To lock the steering, turn the handle bar to the left or right. Push & release the key. Turn the key to "LOCK" position and remove the key.

To Unlock the Steering : To unlock steering, insert the key in steering cum ignition lock & turn it clockwise to "OFF" or "ON" position.

Key : A common key is used for 'Steering cum Ignition lock', 'Fuel tank cap' & 'Side cover lock'.







Fuel Tank Cap

- To open the fuel tank cap, insert the key in the lock and turn it clockwise and lift fuel tank cap.
- 'Fuel Tank Cap' is locked when pushed / pressed back into the place.

Fuel Tap

Fuel tap lever has following positions.

- ON : When fuel level is above Reserve position.
- **RES** : When fuel level is below Reserve position.
- OFF : When fuel supply is to be cut off.

Location of Parts

- **1. Odometer :** It shows the total distance that the vehicle has been ridden.
- **2. Speedometer :** The Speedometer pointer shows the speed of the vehicle.
- 3. Turn Signal Indicator (LH & RH) : When Turn signal switch is turned to Left or Right, Turn pilot indicator LH or RH will flash.
- 4. Hi Beam Indicator : When Headlight is 'ON' & Hi beam is selected with engine running, Hi beam indicator will be lit.

5. Fuel Level Indicator : It shows available fuel in fuel tank.

BOXCER BM 150 BM 150X

- 6. Neutral Indicator : It illuminates when transmission is in Neutral & Ignition switch is 'ON'.
- Steering cum Ignition Switch : Key operated switch for Ignition 'ON'/'OFF' & locking handle bar.

the dipper switch. Hi beam indicator light located on Speedo console will light up when high beam is selected.

Left Handle Bar Switches

Location of Parts

≣O : High Beam ≣O : Low beam

A. Dipper Switch : When headlight is ON,

High or Low beam can be selected with

B. Turn Signal Switch : When the turn signal switch is turned to Left (< →) or Right (ς) , the corresponding turn signals flash on and off. To stop flashing, push the switch in and release.

C. Horn Button : (Hor) Press horn button for sounding horn.

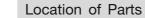
- D. Pass Switch : Press the switch to flash
- the head light. It is used to give signal to vehicles coming from opposite side while overtaking.

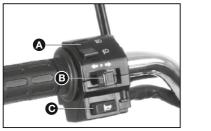
Right Handle Bar Switches

D. Head Light Switch : It has 2 positions.

While engine running, Head lamp, -<u>Å</u>-Tail lamp & Meter lamps 'ON'.

E. Starter Button : Electric starter operates only when the vehicle is in neutral position. Self start is not possible in gear engaged mode.

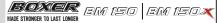




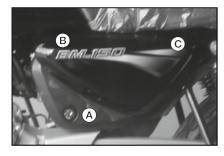




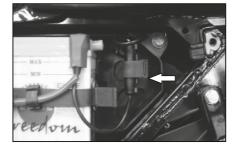




Location of Parts



BOXER BM 150 BM 150X



Removal of Side Cover LH

- Insert the key into the cover lock (A) and turn the key clockwise.
- Hold the cover with both hands and pull ٠ front side (B) first & slide rear side (C) toward front side. Take out 'Side cover LH'.

CAUTION : Remove cover as described above, otherwise cover lugs may break.

Fitment of Side Cover LH

- Match & insert the Lug C (rear side) in bracket mounted on chassis & slide 'Side Cover' LH toward rear side.
- · Match 'B' lug provided on front side of side cover with hole provided on fuel tank & press side cover inside.

CAUTION : Ensure tool kit is fully inserted in tool kit slot.

Location of Parts



Removal of Side Cover RH

- Remove the screw (A) given on 'Side Cover'.
- Hold the cover with both hands and pull front side (B) first & rear side (C) later. Take out 'Side cover'.

CAUTION : Remove cover as described above, otherwise the lugs may break.

Fitment of Side Cover RH

• Match rear side (C) of 'Side Cover' lug with hole located on chassis & press the cover.

BOXER EM 150 EM 150X

- Match the Lug provided on front side (B) of 'Side Cover' with hole provided on 'Fuel Tank' & press 'Side Cover' inside.
- · Match 'Side Cover' properly with bracket provided on 'Chassis' & fix it with Screw (A).



CAUTION : Fit cover as described above to ensure proper fitment.

Location of Parts



Make of Battery may differ from vehicle to vehicle

Battery

- It is located inside the 'Side Cover' LH.
- Always maintain electrolyte level in each cell between Max. & Min. level marks.
- CAUTION : Do not drive/run vehicle in battery disconnected condition. It may lead to damage of electrical / electronic components.

MADE STRONGER TO LAST LONGER



Tool Kit Location

- It is located below the battery box.
- If tool kit is not inserted properly, then it may obstructs LH cover fitment.

CAUTION : Ensure tool kit is fully inserted in tool kit slot.

Location of Parts



Fig. A

Removal of Seat

- Remove 2 nos. M5 Allen bolts provided for fixing of seat on LH & RH sided with M5 allen key.
- Lift the seat from rear side & pull it toward rear side.





Fig. B

Fitment of Seat

- Match & insert the bracket ('1' of Fig. 'B') of seat with slot ('2' of Fig. 'B') provided below fuel tank rear mounting on chassis.
- Push seat towards fuel tank and align lugs ('3' & '4' of Fig. 'B') with bracket on chassis & tighten 2 nos m5 allen bolts ib LH/RH side.

How to Ride Your Bike

Starting The Engine :

- Turn the fuel tap knob to 'ON' or 'RES' position.
- Turn ignition switch key to 'ON' position.
- Confirm that transmission is in neutral.
- If the engine is cold or when starting for first time, use manual choke for quick starting. Choke lever is located on RH side of Carburettor.

Manual Choke



• Keep throttle completely closed, press starter button "() / apply kick to start the engine.



- Release starter button / kick lever as soon as engine starts.
- When the engine is warmed up enough to idle without using choke, return the manual choke lever to OFF position.

Note : Do not let the engine idle longer than 3 minuets otherwise it will overheat.

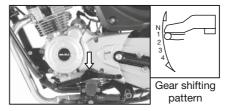
Caution : Do not operate the starter continuously for more than 5 seconds otherwise battery would get discharged. Wait 15 sec. after successive 3 cranks, which will facilitate battery to recover.

Moving Off :

- Check that Center/Side stand is up.
- Depress the clutch lever.
- Shift into 1st gear.
- Open the throttle and release the clutch lever slowly and simultaneously.
- As the clutch starts to engage, open the throttle a little more, giving the engine just enough rpm to keep it from stalling.

Shifting Gears :

- Close throttle & depress the clutch.
- Shift into next higher or lower gear.
- Open the throttle and release the clutch lever slowly and simultaneously.



BOXER EM 150 EM 150X

■ Warning : When shifting down to lower gear, do not shift at such high speed that engine rpm jumps excessively. This may cause engine damage, and rear wheel may skid. Downshifting should be done at recommended speeds as shown in table.

Braking :

- Close the throttle completely, leaving the clutch engaged (except where shifting gears) so that the engine braking will help slow down the motorcycle.
- Shift down one gear at a time so that you are in Neutral when you come to a complete stop.
- When stopping, always apply both brakes at the same time. De-clutch as necessary to avoid engine stalling.

How to Ride Your Bike

Never lock the brakes, or it will cause the tyres to skid. When cornering, use brakes judiciously and do not de-clutch. Reduce your speed before you get into the corner. For emergency braking, disregard downshifting, and concentrate on applying brakes as hard as possible without skidding.

Stopping the Vehicle :

- Close the throttle completely.
- Shift the transmission into neutral.
- Bring the vehicle to complete stop.
- Turn the ignition switch off.

Parking the Vehicle :

- Support the motorcycle on a firm level surface with the center or side stand.
- Lock the steering.
- CAUTION : Do not park on a soft or steeply inclined surface or the motorcycle may fall over.

Running IN

Proper running-in is important for the better life and trouble free performance of the vehicle.

BOXER BM 150 BM 150X

• During first 2000 kms running-in period do not exceed following speed limits.

Kms	1st	2nd	3rd	4th
0 - 1000	14	24	34	43
1000 - 2000	18	30	42	53

- Always keep the speed below the limits mentioned in the table.
- Do not race the engine excessively.
- Do not start moving or race the engine immediately after starting. Run the engine for a minute at idle speed to give the oil a chance to workup into the engine.

Fuel Saving Tips :

A well maintained vehicle and good driving can contribute a lot to the saving of petrol. Following are a few simple fuel saving tips. **Good Riding Habits :**

- Ride smoothly and steadily at an optimum driving speed of 40 to 50 Km/h
- Avoid harsh braking.
- Change the gear judiciously according to the speed and load requirement.
- Don't overload the vehicle above the specified payload.
- Use the accelerator judiciously.
- Cut off the engine if you want to stop for more than two minutes.
- Ensure choke lever is in 'OFF' condition after engine get warm.

How to check mileage (Fuel efficiency)

Best way to calculate mileage is by following the full tank to full tank method.

- Fill way tank full up to small mouth (brim).
- Run the bike for say 100 km.
- Fill the tank full again in same fuel filling station, probably with same fuel dispenser.
- Devide kilometer run / fuel quantity filled.

BOXER EM 150 EM 150X

Optimum Shifting Speeds for best mileage

st gear	:	0 km/h
nd gear	:	14 ~ 17 km/h
rd gear	:	24 ~ 27 km/h
th gear	:	34 ~ 38 km/h

Ensure following maintenance points to get optimum fuel efficiency from your bike.

Fuel	Check fuel lines & connections for leakage.
Spark plug	Inspect and clean spark plug. Adjust electrode gap.
Air filter	Clean air filter element periodically.
Engine oil	Check level. Use recommended grade and quantity.
Brakes	Ensure that the brakes are not dragging / binding.
Clutch	Ensure correct clutch lever play.
Tyre	Always maintain recommended
Pressure.	tyre pressure.
Carburettor	Clean & adjust the carburettor. Adjust idling speed.

Safe Riding Tips

- Always wear helmets while driving or riding. Your helmets should conform to appropriate Indian standards.
- Read thoroughly the instructions in this manual and follow them carefully.



- Avoid unnecessary accessories for the safety of both rider and other motorists.
- Get familiar and follow traffic rules & regulations in your states as well as general traffic signs.
- Familiarise yourself well with starting, acceleration and braking of the vehicle.
- When applying the brakes, use both front and rear brakes simultaneously. Applying only one brake may cause the vehicle to loose control.
- Riding at proper speed and avoiding unnecessary acceleration and

braking are important not only for safety and low fuel consumption, but also for longer life of the vehicle.

- During monsoon drive the vehicle more cautiously. Remember vehicles skid more easily during light showers..
- Drive cautiously. Start early & reach your destination safely.
- Always carry vehicle registration & insurance papers, and a valid driving licence with you.
- Avoid driving on loose sand or stones where vehicle is likely to skid.
- Properly wrap-up loose clothes while driving or riding to avoid entangling in wheel or other objects on road.
- Always concentrate on riding for safety.

Daily Safety Checks :

Before riding motorcycle be sure to check following items. Please give proper importance to these checks and perform all of them before riding motorcycle.

Safe Riding Tips

If any irregularities are found during these checks, refer to the Maintenance chapter & see your dealer for the action required to return the motorcycle to a safe operating condition.

Warning : Failure to perform these checks every day before you ride may result in serious damage or severe accident.

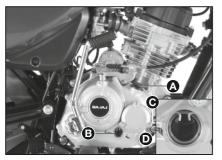
- Enough **fuel level** for planned distance of journey. No fuel leakage in fuel lines.
- Engine oil level (bet" upper lower level mark)
- Throttle cable play of 3 4 mm. Smooth operation & positive return to closed position,
- Steering Lock lever not fouling.
- Brake Pedal Play 15 to 20.
- Wear lining Indicator within usable range. No brake dragging.
- Drive Chain slack of 25 to 30 mm adequately lubricated.
- Function of all lights & horn
- Clutch lever play 2 to 3 mm

- BOXER BM 150 BM 150X
- Smooth steering movement without restriction
- Both stands return to their fully up position.
- Correct **inflation pressure** in both tyres Adequate tyre tread depth- no cracks / cuts.
- Correct rear viewing span adjustment of mirror.

Rainy Season Care :

- It is suggested to customer to take appropriate care in area of high rainfall area. The appropriate surface preventive coat to avoid rusting / poor surface finish on account of adverse atmospheric conditions.
- Vehicle cleaning to be done with soft & clean wet cloth to avoid scratches on painted parts.
- Clean & lubricate all the important parts as detailed in a periodic maintenance chart.
- Do not apply direct water jet on painted, electrical / electronic parts.
- Do not obstruct engine cooling by adding mud protection sheet from front.

Periodic Maintenance Information



A : Oil Filler Cap B : Oil Level Gauge

Engine Oil Level Checking :

- Check engine oil level every day. Park vehicle on level surface on center stand.
- · Check oil level through oil level gauge 'B'.
- Always maintain engine oil level between upper (C) and lower (D) mark provided on Cover RH. Top up with specified grade of oil if the oil level is below lower level mark.
 Engine Oil Capacity :
- Refill at Servicing : 1000 ml.
- During engine overhaul : 1100 ml.



Recommended Engine Oil :

Always insist on Genuine Oil for optimum engine performance.

Model	Engine Oil Grade
Boxer BM150	SAE 20W50 API 'SL' or JASO ' MA' Grade

• Engine oil Replacement Frequency : 1st service & then every 5,000 Kms.

- It is most important to adhere to recommended grade & frequency of oil change for the purpose of long life of critical engine components. For details refer periodic maintenance chart.
- Do not reuse drained oil.

Wheel Puncture :



Use the recommended levers while removing the Tyre / Tube for puncture work. This will avoid any damages to the edges / scratches on paint of the wheel.

BOXER BM 150 BM 150X

Tyre Pressure :

Keep appropriate tyre pressure as mentioned below to increase life of the tyre & for better fuel consumption.

Front	1.75 Kg/Cm2 (25.0 psi)
Rear (Solo)	2.00 Kg/Cm2 (28.5 psi)
Rear (with Pillion)	2.25 Kg/Cm2 (32.0 psi)

Note : Incase the motorcycle is fitted with imported tyres. compliance to respective indian standard & central motor vehicle rules has been ensured.

Periodic Maintenance Information

Battery Maintenance :



Battery type: 12V 5Ah

• Add only distilled water to the battery if battery electrolyte level is bellow min. level mark.



- **CAUTION :** Tap water is not a substitute for distilled water and will shorten the life of the battery.
- When battery is found discharged, it is advised to get it charged immediately.
- Environment care must be taken to dispose off the used battery. It is always recommended to hand over the same to the Authorised battery dealer for proper disposal of the same.

How to keep battery healthy ?

- Switch 'Off' ignition when engine is not running.
- Get battery checked/ charged during periodic services.
- Do not press starter button for more than 5 sec. After 3 successive cranking, wait for 15-20 sec. for battery to recover.
- Disconnect battery +ve & -ve wires if vehicle is to be stored for more than 2 weeks. This avoids self discharge.

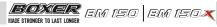
Spark Plug

- Remove spark plug by using plug spanner.
- Clean the spark plug.
- Adjust the gap if incorrect by bending outer electrode carefully.

Spark Plug Gap : 0.7 to 0.8 mm.

Spark Plug : Champion PRZ9HC or Bosch UR4AC



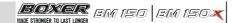


Drive Chain Slackness

- Chain top edge to be kept between the two marks during chain slackness adjustment.
- Care should be taken, that the chain should never run dry. Lubricate chain from outside with SAE 90 oil at every 500 kms.
- Chain slackness will have to be adjusted whenever required.



Periodic Maintenance Information





Cleaning

Drive Chain

- Lubricate chain every 500 kilometers with SAE 90 oil.
- Check & if required adjust chain slackness (whenever required).
- Remove, clean, inspect and lubricate (overhaul) drive chain at every 5,000 kilometers.

Method of chain lubrication :

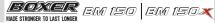
- Remove chain covers & drive chain link lock
- Take out drive chain.



Chain Lubrication

- Clean the chain with nylon brush by using kerosene/ with the help of chain cleaning machine.
- After cleaning, dip chain in SAE 90 oil / lubricate in molten grease of chain cleaning machine.
- For effective lubrication recommended chain spray can be used. Spray the lubricant into clearance between drive chain roller & bush. Wipe out excess lubricant by using lint free cloth.

Periodic Maintenance & Lubrication Chart



			1	RECO	r					
Sr. No.	Operation	Servicing Kms	1st 750	2nd 5000	3rd 10000	4th 15000	5th 20000	6th 25000	7th 30000	
1.	Servicing		1	1	1	1	1	1	1	1st - 750 Kms / 30 Days 2nd onward @5000 Kms
2.	Engine idling speed / CO%	A	Α	Α	Α	Α	Α	Α	Α	
3.	Valve tappet clearance	A	Α	Α	Α	Α	Α	Α	А	
4.	Engine oil	R	R	R	R	R	R	R	R	Replace at 5000 Kms
5.	Oil strainer	CL	CL	CL	CL	CL	CL	CL	CL	Clean at 5000 Kms
6.	Paper oil filter	R	R	R	R	R	R	R	R	Replace at every oil change
7.	Spark plug functioning / Gap	C, A, R	C, A	C, A	С, А	R	C, A	C, A	R	Replace at every 15000Kms
8.	Air cleaner element Clean* / Replace	CL, R	CL	CL	CL	R	CL	CL	R	Clean at every 5000Kms Replace at every 15000Kms
9.	Air filter cover 'O' Ring	R					R			Replace at every 20000Kms
10.	Fuel cock sediment bowl cleaning	CL		CL	CL	CL	CL	CL	CL	Clean at every 5000 kms
11.	Carburettor float bowl cleaning	CL			CL		CL		CL	Clean at every 10000Kms
12.	Carburettor rubber duct	C, R	С	С	С	С	R	С	С	Replace at every 20000kms
13.	Fuel pipes	C, R	С	С	С	С	R	С	С	Replace at every 20000kms
14.	Battery electrolyte level	C, A	C, A	C, A	C, A	C, A	C, A	C, A	C, A	
15.	Clutch lever free play	C, A	C, A	C, A	C, A	C, A	C, A	C, A	C, A	

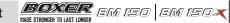
* More frequent cleaning may be required when driving in dusty condition.

Periodic Maintenance & Lubrication Chart



~	Operation	RECOMMENDED FREQUENCY									
Sr. No.		Servicing	1st	2nd	3rd	4th	5th	6th	7th		
		Kms	750	5000	10000	15000	20000	25000	30000		
16.	Throttle grip play	C, A	C, A	C, A	C, A	C, A	C, A	C, A	С, А		
17.	Rear brake pedal free play	C, A	C, A	C, A	С, А	C, A	C, A	C, A	С, А		
18.	Brake lining or pad wear	CL, R		CL	CL	CL, R	CL	CL	CL, R	Replace at every 15000kms	
19.	Brake fluid level / Top up / Replace	C, A, R	C, A	C, A	С, А	C, A	C, A	C, A	R	Replace at every 30000kms	
20.	Master cylinder cup and dust seal	R							R	Replace at every 30000kms	
21.	Caliper piston seal and dust seal	R							R	Replace at every 30000kms	
22.	Brake hose pipe	C, R							C, R	Replace at every 30000kms	
23.	Brake cam & pedal pivot pin	L				L			L		
24.	Steering play	C, A	C, A	C, A	С, А	C, A	С, А	C, A	С, А		
25.	Steering stem bearing	C, L, R			C,L,R		C,L,R		C,L,R		
26.	All fasteners tightness	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т		
27.	Rear sprocket fasteners	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т		
28.	Rear wheel rubber shock damper	C, R			C, R		C, R		C, R	Replace at every 10000kms	
29.	Silencer drain hole cleaning	CL	CL	CL	CL	CL	CL	CL	CL	Clean at every 5000Kms	
30.	Cylinder head de-carbonising, valve lapping										
	& Replace valve oil seals	CL				CL			CL	Clean at every 15000Kms	
31.	Engine air breather tube	R					R			Replace at every 20000Km	
32.	Drive chain slackness adjustment & lubrication	C, A, L	C,A,L	Lubricate at every 500kms. A- slackness whenever req							

Periodic Maintenance & Lubrication Chart



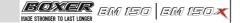
~	Operation		1	RECO						
Sr. No.		Servicing	1st	2nd	3rd	4th	5th	6th	7th	
		Kms	750	5000	10000	15000	20000	25000	30000	
33.	Drive chain 'O' ring type (If applicable)	L	At every 500 Kms							
34.	Drive chain remove, clean, insp. & lub. (O/H)	CL, L		CL, L	At every 5000Kms					
35.	Drive chain link lock	R		R	R	R	R	R	R	Replace at every 5000Kms
36.	Wheel bearing (for non sealed bearings only)	C, L					C, L			At every 20000Kms
37.	Front & Rear wheel spoke tightening	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	С, Т	At every service
38.	Tyre tread wear	C, R			C, R	At every ser. after 2nd ser.				
39.	Front fork oil	R					R			Replace at every 20000Kms
40.	TPS C, A	C, A	C, A	C, A	С, А	C, A	C, A	C, A	С, А	At every 5000Kms
41.	RSA - Check gas pressure	C, A		1		C, A			С, А	At every 20000Kms.
42.	Starter clutch bush kit for dry type	CL, R				CL, R			CL, R	(If applicable)
43.	Clutch switch cleaning (if applicable)	CL			CL		CL		CL	
44.	General lubrication	L	L	L	L	L	L	L	L	
45.	Swing arm pivot pin lubrication	L					L			Lubricate at every 20000Kms
46.	Engine foundation silent bush (If applicable)	R				R			R	Replace at every 15000Kms

C : Check, A : Adjust, CL : Clean, R : Replace, T : Tighten, L : Lubricate

Note : Periodic parts / lubricants to be replaced as per Periodic Maintenance and Lubrication Chart are mandatory and the same are chargeable to customer.

Non-use maintenance is necessary if a vehicle remains off road for a longer duration (more than 15 days**). The correct and careful nonuse maintenance carried out before storing the vehicle will prevent the vehicle from rusting and from such other non-operational damages like fire hazards.

- Clean the entire vehicle thoroughly.
- Empty the fuel from the fuel tank and carburettor float bowl (if fuel is left in for a longer time, the fuel will break and gummy substance could clog the carburettor).
- · Remove spark plug & put several drops of 2T oil into the cylinder. Kick engine over slowly a few times to coat cylinder wall with oil & install back spark plug.
- Set the vehicle on a box or a stand so that both wheels are raised off the ground.
- · Sprav oil on all unpainted metal surfaces to prevent rusting. Avoid getting oil on rubber parts or brake liners.
- Lubricate the control cables.
- · Cover entire vehicle neatly. Make sure that storage area is well ventilated & free from any source of flames or spark.
- Fill 10% excess air pressure in both wheels.



** For Batterv :

- a. Remove battery and keep it on wooden plank, in properly ventilated area.
- b. Before taking the vehicle for use.
- Get the battery recharged from the Authorised Service Center.
- Check and correct the electrolyte level and apply petroleum jelly on terminals (applicable to certain models).

Preparation for regular use after storage :

- Clean the vehicle
- · Make sure the spark plug is tight.
- Fill the fuel tank with fuel.
- Change the engine oil.
- Check all the points listed in the Daily Safety Checks section.
- Check and inflate tyres to proper tyre pressure.

BOXER BM 150 BM 150X

1.	Wash the vehicle.
	Replace / Top up engine oil as per periodic maintenance schedule.
	Clean air filter element. (Replace element at every 15,000 kms).
4.	Check all fuel lines. (Replace fuel pipes at every 20,000 kms).
	Clean oil strainer / centrifugal filter as per periodic maintenance schedule. (Replace, if required).
	Clean fuel cock sediment bowl.
7.	Drain carburettor / clean float bowl as per periodic maintenance schedule.
8.	Clean, Check & Adjust spark plug gap. (Replace at every 15,000 kms).
	Replace carburetor duct, & Air filter 'O' ring at every 20,000 kms.
10.	Check & adjust valve clearance (if required). Decarbonize cylinder head at every 15,000 kms.
11.	Clean & lubricate drive chain, adjust chain slackness & replace chain lock at 5000Kms.
12.	Replace rear wheel rubber damper at every 10,000 kms. (if required)
13.	Replace engine air breather tube at every 20,000 kms.
14.	Clean silencer drain hole at every 5,000 kms.
	Check brake lining & pad wear and adjust brakes. Replace at every 15,000 kms. (if required)
	Brake cam & pin lubricate at every 15,000 kms.
17.	Replace master cylinder cup & dust seal, caliper piston seal & dust seal, brake hose pipe at every 30,000 Kms. (If applicable)
	Check and top up brake fluid level. Replace brake fluid at every 30000 kms. (If applicable)
	Check and adjust steering freeness. Replace steering cone kit at 10000 kms.
	Replace fork oil at every 20000 kms.
	Clean clutch switch at every 10000 kms. (If applicable)
	Check & adjust clutch, accelerator.
23.	Replace starter clutch bush kit at every 15000 kms. (If applicable)
	Replace engine foundation silent bush at every 15000 kms. (If applicable)
	Check & tight nuts, bolts & fasteners to the recommended torque.
	Lubricate specific points as per lubrication schedule, swing arm pivot pin at 20,000 Kms.
	Check battery voltage & electrolyte level. Top up with distilled water if reqd. Route cables. Apply petroleum jelly & fit terminal caps properly,
	Start engine, check & adjust horn & all lights, TPS, auto choke, thermal sensor. (If applicable)
	Check idling and CO%. Tune engine & carburetor if required.
	Rear shocker gas pressure at every 20,000 kms. for proper functioning. (If applicable)
	Front / Rear spokes tightening.
	Check & Adjust air pressures in the tyres. Carry out any additional work if required.
	Test ride the Vehicle.
	Clean the vehicle at the time of delivery