

Dear Customer,

Congratulations on becoming the proud owner of a “Avenger 220 DTS-i” motorcycle, one of the finest motorcycles in the country.

Your safety and the safety of others is extremely important. Hence, before you ride the bike, please read this Owner's Manual carefully and familiarize yourself with the operating mechanism, controls and maintenance requirements. This will ensure you a long and trouble free ownership experience.

To keep your bike in perfect running condition and ensure consistent performance, we have specially programmed the periodic maintenance services which includes 3 Free and subsequent Paid services.

We earnestly advise you to avail all these services at any of our Vehicle Dealers or Authorised Service Dealers (ASD) as per the schedule contained in this booklet. They are well equipped with all necessary facilities / genuine parts / oil and trained manpower. All this would ensure better care of your bike.

Your “Avenger 220 DTS-i” has been provided with a warranty of **5 Years or 75,000 Kms.** whichever occurs earlier from the date of sale. For details please refer to “Warranty : Scope & Limits” given in this manual.

Should you require any additional information feel free to contact us on helpline numbers or e-mail us at: customerservice@bajajauto.co.in or visit the Bajaj Auto website www.bajajauto.com

Thank you for choosing a Avenger and wish you unlimited miles of happy riding !!

**SERVICE DEPARTMENT
BAJAJ AUTO LIMITED**

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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 at any moment without being obliged to bring this booklet upto-date & to do modifications on the vehicle, parts or accessories as may be convenient and necessary.

Technical Specifications

AVENGER
220 CRUISE

AVENGER
220 STREET

Engine	: 4 stroke
Bore X Stroke	: 67.00 mm x 62.40 mm
Eng. Displacement	: 219.89 CC
Compression Ratio	: 9.5 : 1
Idling Speed	: 1400 +/- 150
Max. Net Power	: 19.03 PS at 8400 rpm
Max. Net Torque	: 17.5 Nm at 7000 rpm
Ignition System	: DC CDI
Spark Plug	: CHAMPION P-RG6HCC, BOSCH - UR6CE
Spark Plug Gap	: 0.8 to 0.9 mm.
Transmission	: 5 speed constant mesh
Gear Shifting	
Pattern	: 1 Down 4 Up
Engine Lubrication	: Wet sump, forced
Cooling System	: Oil cooled
Starting Aid	: Electric Starter
Brakes	
Front Brake	: Hydraulic disc brake.
Rear Brake	: Mechanical expanding shoe.

Fuel Tank Capacity Full	:13 liters
Reserve	: 3.8 liters
Dimensions	
Length	: 2210 mm
Width	: 806 mm
Height	: 1321 mm (Cruise) : 1070 mm (Street)
Wheel base	: 1490 mm
Ground Clearance	: 169 mm
Tyre Size	
Front	: 90/90 - 17, 49P
Rear	: 130/90 -15, 66P
Cruise	: Tube Tyre
Street	: Tubeless Tyre
Tyre Pressure	
Front	: 1.5Kg/cm ² (21PSI)
Rear (Solo)	: 1.5Kg/cm ² (21PSI)
Rear (with Pillion)	: 1.75Kg/cm ² (25PSI)
Electrical System	: 12 Volts DC
Battery	: 12V, 9Ah MF
Head Lamp	: 55/60W (Blue Tinge)

Technical Specifications

AVENGER
220 CRUISE

AVENGER
220 STREET

DRL	: LED
Tail /Stop Lamp	: 5/21W
Turn Signal Lamp	: 10W
Speedometer Illumination	: LCD
Bajaj Logo	: LED
Fuel Gauge	: LCD Bars
Reserve Indicator	: LCD
Neutral Indicator	: LED
High Beam Indicator	: LED
Turn Pilot Indicator	: LED
Low Battery Indicator	: LED
ABS Indicator	: LED
Horn	: 12V DC
Kerb Weight (Non ABS)	: 159 kg. (Cruise) : 155 kg. (Street)
Gross Weight (Non ABS)	: 289 kg. (Cruise) : 285 kg. (Street)
Kerb Weight (ABS)	: 161 Kg. (Cruise) : 157 Kg. (Street)
Gross Weight (ABS)	: 291 Kg. (Cruise) : 287 Kg. (Street)

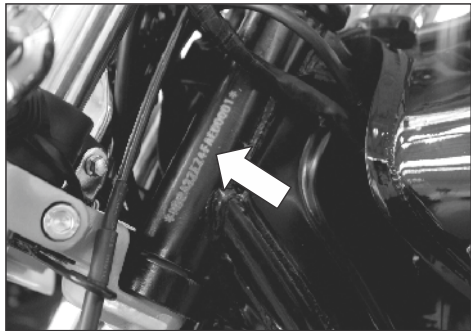
Note :

- All dimensions are under UNLADEN condition.
- Above information is subject to change without any notice.
- This vehicle complies to BS IV standards.
- DRL is government regulation.

Identification Data

AVENGER | **AVENGER**
220 CRUISE | **220 STREET**

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.

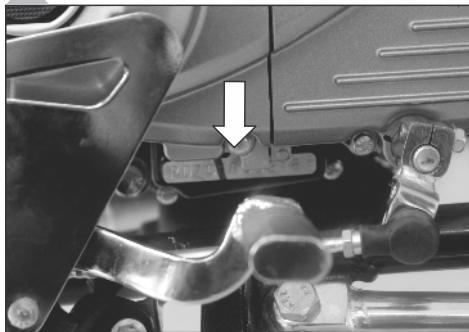


Frame Number Location

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

Engine Number Location

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



Location of Parts

AVENGER
220 CRUISE



AVENGER
220 STREET



Note : Vehicle image is of Avenger 220 Street (Non ABS).



Ignition Lock : It is located at right side of the frame below 'Fuel Tank'. It has 2 positions. The key can be removed from switch only in 'OFF' position.

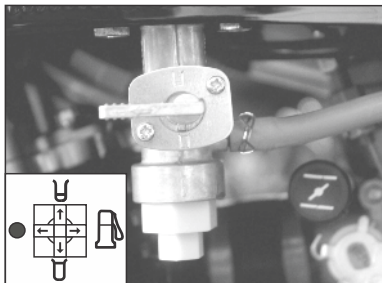
Key Position	Function
OFF 	Engine off. All Electrical circuits off
ON 	DRL gets ON with High Intensity. Tail lamp & Tell-Tale Indicator ON Speedometer illumination gets ON & OFF. If Kill switch ON, engine can be started by starter button.

Steering Lock :

To lock the steering : Turn the handle bar to the left. Slide to open lock cover clockwise. Insert key in lock. Turn the key anti-clockwise and push key in while turning the handle bar slightly to 'Right'. Turn the key clockwise (Original position). Pull the key out.

To unlock the steering : Insert key in lock and turn anti-clockwise. Hold the key in this position & move the handle bar to 'Right' to release the lock. Pull the key out.

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



Fuel Tap

Fuel tap lever has following positions.

●	OFF : When fuel supply is to be cut off.
U	ON : When fuel level is above reserve position.
hook	RES : When fuel level is below reserve position.

Fuel Tank Cap

- To open the fuel tank cap, insert the key in the lock
- Turn it clockwise and lift fuel tank cap.
- To lock the 'Fuel Tank Cap' insert the key in the lock and press fuel tank cap. 'Click' sound ensures cap is fully locked. Remove the key.

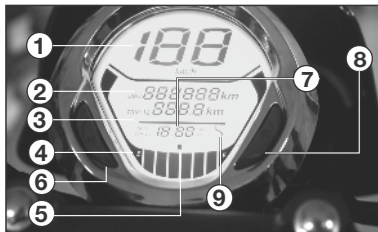
Precaution :

Dont attach metallic 'Key chain' as it may damage paint/plating of petrol tank/tank cover.

Speedometer Details

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- 1. Speedometer** : The speedometer shows the speed of the vehicle in Km/h.
- 2. Odometer** : It shows total distance vehicle has covered. After 99999 Km rolls over to Zero & continue updating.
- 3. Trip Meter** : It shows the distance traveled since it was last reset to zero. After 999.9 Km rolls over to Zero & continue updating.
- 4. Fuel level indicator**: It shows approx. available fuel in fuel tank.
- 5. Low Fuel Level Indicator** : It will get on when fuel level drop to 2 bars & blinking will start at 1 bar or less.
- 6. Mode Button** : Used for changing mode while selecting & setting Trip1, Trip2, Clock & Service reminder.
- 7. Digital Clock** : It indicates **time in HR : MM (AM/PM)**
- 8. Set Button**: Used for re-setting Trip meter, Clock & Service reminder.


Tell Tale Indicator



Non ABS



ABS

- 9. Service Reminder**: This reminds customer for "Service Due" it glows if ODO reading reaches 450 Km, 4450 Km, 9450 Km, 14450 Km, & so on after every 5000 Km. Icon will continue to glow till it is reset. This icon is to be reset after service is carried out.
- 10. Turn Signal Indicator (LH & RH)**: It blinks when Turn signal switch is turned to L/R.
- 11. Neutral Indicator** : When transmission is in neutral, the neutral indicator will glow.
- 12. Low Battery Indicator** : It indicates battery needs charging.
- 13. Hi Beam Indicator** : When the H/L is ON & Hi beam is selected then indicator will glow.
- 14. Bajaj Logo** : Bajaj logo flying 'B' glows.
- 15. ABS Indicator ()**: With Ignition switch ON the ABS indicator glows. When vehicle speed is more than 5 Km/h the ABS indicator goes off, if this indicator glows while vehicle is running, it means there is problem in ABS unit.

Speedometer Setting

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Trip Meter Reset :

- Engine & Vehicle speed should be zero.
- Press Mode button for less than 2 sec. Mode gets changed from Trip 1 – Trip 2 – Trip 1.
- Press Set button for more than 5 sec. Selected trip mode is reset to zero. Other trip mode continues updating.

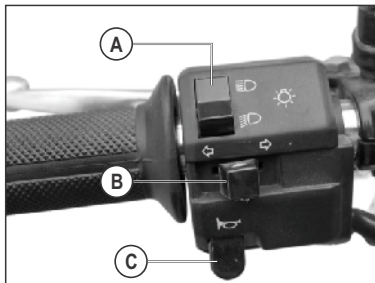
Service Reminder Reset :

Bring the motorcycle at authorised BAL dealership for re-setting the service reminder icon.

Clock Reset :

- Digital clock indicates time in HR & MM separated by colon ':'
- It is 12 hour clock.
- Initially ':' will be blinking
- Clock setting is possible in TRIP 1 mode only.
- Engine & Vehicle speed should be zero.

1.	Press mode & set push button together for more than 2 sec.	':' stops blinking Digits starts blinking
2.	Press mode button for less than 1 sec.	Hour digits will increase by one.
3.	Press Mode button continuously	Speedy increase in Hour digit
4.	Press Set button for less than 1 sec.	Increase in Minute digits
5.	Press Set button continuously	Speedy increase in minute digit
6.	Press mode & set button together for more than 2 sec.	Set value will be saved Exit clock setting mode Digits stop blinking ':' start blinking
7.	Clock set mode is selected & no editing is carried out for more than 5 sec.	Auto exit without saving set value. If engine/vehicle rpm is given then system will exit from clock set mode without saving set value.

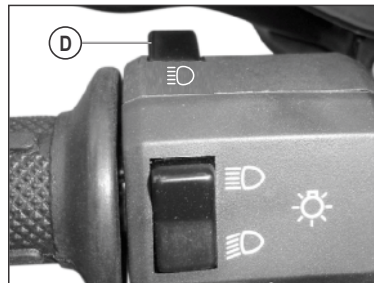


A. Dipper Switch : When headlight is ON, High or Low beam can be selected with the dipper switch.

☰○ : High Beam ☷○ : Low beam

B. Turn Signal Switch : When the turn signal switch is turned to Left (↶) or Right (↷) the corresponding turn signals flash on and off. To stop blinking push the switch in & release.

C. Horn Button : Press for sound 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.

Hi/Low beam Switch	Headlamp Status	Effect of Pass Switch
Low beam ☷○	Low beam 'ON'	Hi beam 'ON'
Hi beam ☰○	Hi beam 'ON'	No change
Any	OFF	Hi beam 'ON'

Control Switches - RH

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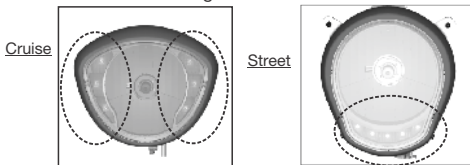
- E. Starter Button** : It operates the electric starter. It is recommended to start the engine with the transmission in neutral. Vehicle in Gear - Press clutch lever & operate starter button to start the engine.
- F. Engine Kill Switch** : It is used for switching ON (●) & OFF (⊗) engine.
- F. Light Switch** : It has 2 positions. When ignition switch is 'ON', lighting system will work as per given table.

● : Tail lamp will get 'ON'. DRL 'ON' (High Intensity)

☀ : Head lamp, Tail lamp, Number Plate lamp & Speedometer illumination will get 'ON'. DRL remains 'ON' (Low intensity)

Day Time Running Light Feature:

- Day Time Running light is provided inside headlamp.
- Day Time running light gets 'ON' (High intensity) when ignition switch turned to 'ON' position.
- After headlight is turned to 'ON' position, intensity of DRL LED's will get reduced.

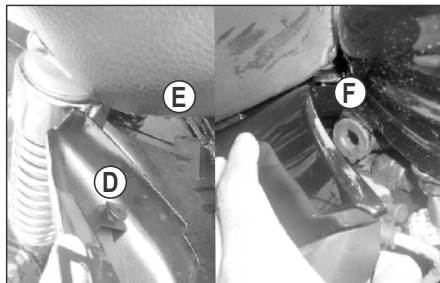
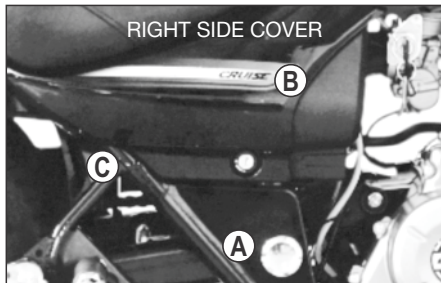


Ignition Switch	Light Switch	DRL	Head Light
ON	OFF	ON High Intensity	OFF
ON	ON	ON Low Intensity	ON

Note: The inside of the lamp lens might fog up after using the motorcycle in rain or after washing. Fog inside the lamp lens will disappear gradually by switching on the lamp while driving the motorcycle. The amount of time it takes for the fog to disperse depends on the humidity of the ambient air. Fog in non functional areas other than reflector does not affect the lamp performance.


Removal & Fitment of Side Cover

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Removal of Side Cover RH

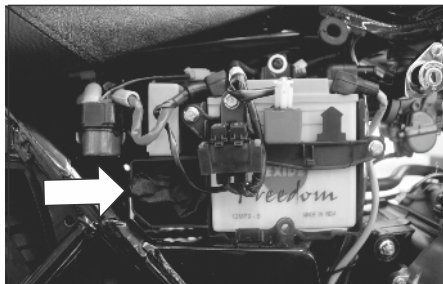
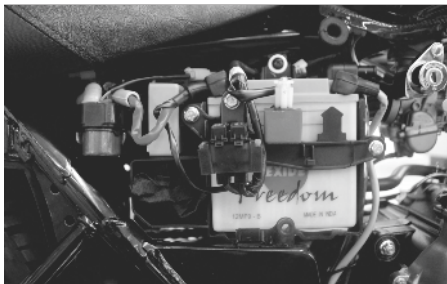
- Insert the key into the cover lock (A) and turn the key clockwise.
- Pull front side (B) first
- Slide side cover toward rear (C).
- Take out 'Side cover'.

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

Fitment of Side Cover RH

- Match 'Side Cover' rear bullet (D) with bracket (E) located on chassis & slide toward front.
- Match 'Side Cover' front bullet with slot (F) & press side cover by other hand for positive engagement of bullet of side panel with tank slot.
- Match 'Side Cover' lock properly.
- Insert the key into the cover lock (A) and turn the key anti-clockwise.

 **CAUTION** : Ensure tool kit is inserted properly into compartment



Battery

- It is located inside the 'Side Cover' RH.
- Always maintain electrolyte level in each cell between max and min level lines.
- Always keep a watch on battery charge level indicating icon, if it flashes (indicates battery is in low charged condition), show the vehicle to authorised BAL dealer.

! **CAUTION** : Remove cover as described above, Otherwise the lugs may break.

Tool Kit Location

- Tool kit is located in tool kit compartment.
- Lid is provided inside RH side cover.

First Aid Kit Location

- First aid kit is to be stored along with tool kit in the slot provided near battery.

! **CAUTION** : Ensure tool kit is inserted properly into compartment.

Daily Safety Checks

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

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 (between upper and lower level mark)
- **Throttle cable** play of 2 ~ 3 mm. Smooth operation and positive return to closed position,
- **Brake Pedal** Play - 20 to 30 mm.
- **Wear lining Indicator** within usable range. No brake dragging.
- **Brake Fluid** level above MIN mark provided on reservoir, applicable to disc brake vehicle.
- **Drive Chain** slack of 25 to 35 mm adequately lubricated.
- Function of all **lights & horn**
- **Clutch lever** play - 2 to 3 mm
- Smooth **steering movement** without restriction.
- Both **stand** 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.

How to Ride Your Bike

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Starting The Engine :

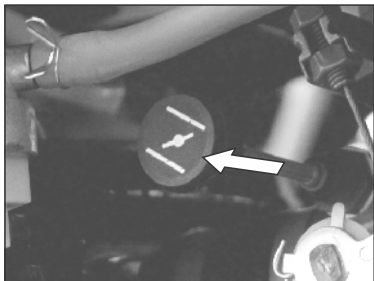
- Keep fuel tap to **ON** or **RES** position.
- Turn ignition / kill switch to **ON** position.
- Confirm that transmission is in neutral.
- If the engine is cold or when starting for first time, use choke for quick starting.
- Keep throttle completely closed, press starter button “**Ⓢ**”.
- When the engine is warmed up enough to idle without using choke, return the choke to “OFF” position.

Note : When the engine is already warm on hot days (Higher than 35°C), open the throttle part away instead of using the choke, and then start the engine.

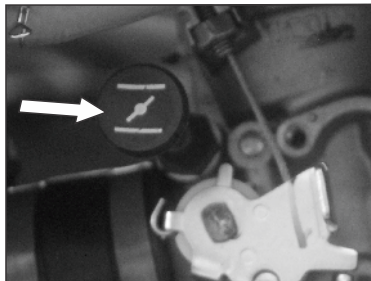


Caution : Do not operate the starter continuously for more than 5 seconds. Wait for 15 seconds before you re crank.

Note : The motorcycle is equipped with a starter lockout switch. The starter switch will operate only when transmission is in neutral or clutch lever depressed.



Choke “ON” - Pull



Choke “OFF” - Push

How to Ride Your Bike

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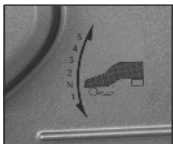
Moving Off :

- Check that Center/Side stand is up.
- Depress 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 running.

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.

From 5 th to 4 th	50 km/h
From 4 th to 3 rd	40 km/h
From 3 rd to 2 nd	30 km/h
From 2 nd to 1 st	20 km/h



Gear Shifting Pattern



Warning : When shifting down to lower gear, do not shift at such high speed that engine rpm jumps excessively. This may cause engine damage, & 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.
- Never lock the brakes, or it will cause the tyres to skid. When cornering, use brakes judiciously & 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 & trouble free performance of the vehicle.

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

Kms	1st	2nd	3rd	4th	5th
0 - 1000	10	20	30	35	45
1000 - 2000	15	30	40	45	55

- 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.

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.
- Divide kilometer run / fuel quantity filled.

Ensure following maintenance points to get optimum performance from your bike.

Fuel	Check fuel lines & connections for leakage.
Spark Plugs	Inspect and clean spark plugs. Adjust electrode gap. Replace spark plugs as per P.M. Chart.
Air Filter	Clean the air filter element periodically. Replace as per Periodic Maintenance Chart.
Engine Oil	Check engine oil level. Always use recommended grade and quantity.
Brakes	Ensure that the brakes are not dragging / binding.
Clutch	Ensure correct clutch lever play.
Tyre Air Pressure	Always maintain recommended tyre pressure.
Carburettor	Clean & adjust the carburettor. Adjust idling speed.

Safe Riding Tips

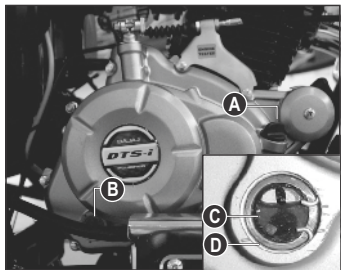
- Always wear Helmet while driving or riding. Your helmet should conform to appropriate Indian standards.
- Read thoroughly the instructions given in this manual and follow them carefully.
- Avoid unnecessary accessories for the safety of both rider and other motorists.
- Get familiar and follow traffic 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 & rear brakes simultaneously. Applying only one brake may cause the vehicle to lose 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.

Monsoon Care :

- It is suggested to customer to take appropriate care in area of heavy monsoon or 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.



- A : Oil filler hole**
B : Oil level gauge

Engine Oil Level Checking :

- Check engine oil level every day. Park vehicle on level surface.
- 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.
- Completely screw in the dipstick after oil filling is over.

Engine Oil Capacity :

- Refill at servicing : 1150 ml.
- During engine overhaul : 1200 ml.

Recommended Engine Oil:

Always insist on Bajaj DTS-i Engine Oil for optimum engine performance and warranty benefits. It is a specially formulated oil for vehicles with DTS-i engines.

Model	Recommended Engine oil
Avenger 220 Cruise/Street	Bajaj DTS-i 20W50 OR Bajaj DTS-i 10W50 Synthetic

- **Engine oil replacement frequency : 1st service & then every 10,000 Km.**
- **Engine oil level top-up frequency : Every 5000 km.**



CAUTION :

- 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.

Battery



Battery : 12V-9 Ah MF

- Always ensure that battery electrolyte level is in between max & min level marks.
- Check & top up battery by distilled water if electrolyte level is below min level mark.

! **CAUTION** : Tap water is not a substitute for distilled water and will shorten the life of the battery.

- Environment care must be taken to dispose off the used battery. It is always recommended to hand over the same to the Authorised battery / Bajaj dealer for proper disposal of the same.
- When battery is found discharged, it is advised to get it charged immediately.

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! **CAUTION** : Do not drive/run vehicle in battery disconnected condition. It may lead to damage of electrical /electronic components.

- Warranty on battery is 18 months from the date of purchase of vehicle.

How to keep battery healthy ?

- Switch 'Off' ignition if engine is not running.
- Do not press starter button for more than 5 sec. After 3 successive cranking, wait for 15-20 sec. for battery to recover.
- **Do not add extra electrical accessories such as - Remote, Bigger horn, Musical brake light etc. This will reduce life of battery**
- If vehicle is to be stored for more than 2 weeks disconnect battery to avoid self discharge.

! **CAUTION** :

- While disconnecting always disconnect negative (-ve) cable first.
- While refitting always connect positive (+ve) cable first.

Cruise Tube Tyre



Street Tubeless Tyre



Tube Tyre: Ensure no damage to wheel rim while removing tyre for puncture & replacement.

Ensure spokes are fully tight. In case loose spoke, kindly visit to authorised service center for re-tightening.

Tubeless Tyre :

The main advantage of tubeless tyres is in case of puncture the rate of air leak is very slow, hence customer can easily drive the vehicle upto nearest puncture repair shop for removing puncture.



CAUTION : The walls of the tyres in contact with the wheel rim seals air & should not be damaged in any way during fitment / removal of tyre.

Wheel Puncture:

- Visit nearest known tubeless tyre repair shop to remove puncture.
- Remove puncture by Filler or Plug method
- Do not use patch method to remove puncture.

Tyre Pressure :

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

Avenger 220	Front	21 PSI
	Rear (Solo)	21 PSI
	Rear (with Pillion)	25 PSI

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



Front Brake Fluid Level

- Front brake fluid master cylinder reservoir is located near RH switch on handle bar.
- To check oil level, keep the vehicle on Centre stand with handle bar in straight position.
- Always ensure that brake fluid level is above 'MIN' mark given on inspection window.
- Use only DOT 4 brake fluid (from sealed container) to top up if required.
- Change the brake fluid as per periodic maintenance schedule.

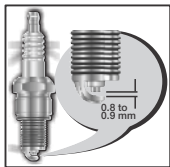
Single Channel ABS unit for Front brake is fitted on this vehicle.

ABS System Information:

- Always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions. The braking distance for motorcycle equipped with an anti-lock braking system may be longer than for those without it on rough road conditions. During these conditions the vehicle should be driven at reduced speeds.
- When you apply Front brake under conditions which may lock the wheels, you feel a corresponding sensation (pulsation) in Front brake lever. This is normal and it means your ABS is active.
- Also it is recommended to use both front & rear brakes simultaneously.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.

Spark Plug

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



Spark Plug Gap : 0.8 to 0.9 mm.

Spark Plug (2 Nos.) : CHAMPION P-RG6HCC
BOSCH - UR6CE

Drive Chain Slackness

- Chain slackness will have to be adjusted whenever required.
- Std. Chain slackness 25 ~ 35 mm.
- Marking on chain adjusters should be identically positioned on both sides.

Matte finish painted parts cleaning

Do's :

- Use Colin or dish washing detergent solution for cleaning.(1 spoon in ½ bucket)
Remove foreign substances like insect remains, road debris using a soft brush.
- Use microfiber cleaning cloths Ex.- Muslin cloth for painted parts cleaning.

Don'ts :

- Do not use wax/spray/products made for normal glossy paint for cleaning.
- Do not use products that are even mildly abrasive, such as polishes, glazes, or rubbing compounds.
- Do not use mechanical cleaners/polishers.
- Do not use terrycloth or paper towels or shine enhancement products.
- Do not rub the finish vigorously, this will burnish the paint finish, causing a permanent shiny spot. Shiny spots cannot be removed.
- No Polishing/Teflon coating on painted parts.

**Drive
Chain
Cleaning**



Drive chain must be cleaned & lubricated as per periodic maintenance schedule.

Drive Chain (O-ring type)

- 'O' rings must always be kept wet for best performance hence lubricate every 500 Km.
- **O-ring chain lubrication can easily be done by owners using Bajaj 'Chain Lube Spray Can' available with Bajaj dealers.**

**Drive
Chain
Lubrication**



Method of O-ring Chain Lubrication :

- Park vehicle perpendicular to the ground on level surface. Clean the chain by using lint free cloth (If excessive mud / slush found approach Bajaj Service Center for proper cleaning)
- Shake the can vigorously by holding vertically upright till the noise of steel ball inside heard uniformly.
- Hold spray can at the back of rear sprocket with extension tube nose at 5~10 cm.
- Rotate the wheel in reverse direction & spray the lube on middle portion of the chain up to full length of the chain.

Free Service Guidelines

Customer ID :

Instruction to avail Free Service through Digitized Free Service Coupon

Please follow following procedure : -

- Please provide your mobile number to Dealer at the time of buying of new Bajaj Vehicle.
- In case of change in mobile number, please update to Dealer / ASD.
- You will receive the Customer ID through SMS at the time of buying of new vehicle.
- Please note the Customer ID in Owner's Manual for your reference.
- During Free Service, please provide your Customer ID to Dealer / ASD workshop.
- When you are at Dealership / ASD workshop for Free Service, you will receive the 'Unique Coupon Number' (UCN) through SMS in your mobile.
- Please inform the UCN to Dealer / ASD at the time of Free Service.
(ASD-Authorised Service Dealer)

Periodic Service Criteria

Service	Days	Kms	whichever occurs earlier
1st Free Service	30~45	500~750	
2nd Free Service	240	4500~5000	
3rd Free Service	360	9500~10000	
Subsequent Paid services	120 Days from last Service	Every 5000 Km after previous service	

Availing all Free / Paid Services, replacing mandatory periodic parts & engine oil will entitle warranty eligibility.

Periodic Maintenance & Lubrication Chart

AVENGER
220 CRUISE

AVENGER
220 STREET

Sr. No.	Operation	Servicing Kms	RECOMMENDED FREQUENCY							Subsequent
			1 st Free	2 nd Free	3 rd Free	Every 5000 Km after Previous Service				
			500 750	4500 5000	9500 10000					
1.	Water wash & dry the vehicle completely		3	3	3	3	3	3	3	Ensure to prevent water entry in Petrol tank, Silencer & electrical Parts. Use caustic free detergent for washing.
2.	Engine oil (Bajaj DTSi 10000 oil)	C,R	<input type="checkbox"/>	Top Up	<input type="checkbox"/>	Top Up	<input type="checkbox"/>	Top Up	<input type="checkbox"/>	Bajaj DTS-i 20W50 OR Bajaj DTS-i 10W50 Synthetic
3.	Engine oil filter**	C,R	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
4.	Oil strainer	CL	CL		CL		CL		CL	
5.	Body centrifugal filter**	CL	CL				CL		CL	
6.	Starter Clutch (Dry Type)**	L		L	L	L	L	L	L	Use recommended Molycote grease.
7.	Spark plug	CL,A,R			CL,A		CL,A		<input type="checkbox"/>	
8.	Air cleaner element ***	CL,R	CL	CL	CL	<input type="checkbox"/>	CL	CL	<input type="checkbox"/>	

3 Tick in the box after replacing the periodic parts.

Periodic Maintenance & Lubrication Chart

AVENGER
220 CRUISE

AVENGER
220 STREET

Sr. No.	Operation	Servicing Kms	RECOMMENDED FREQUENCY							Subsequent
			1 st Free	2 nd Free	3 rd Free	Every 5000 Km after Previous Service				
			500 750	4500 5000	9500 10000					
9.	Air filter cover 'O' ring	CL,R	CL	CL	CL	<input type="checkbox"/> R	CL	CL	<input type="checkbox"/> R	
10.	In line paper filter	R				<input type="checkbox"/> R			<input type="checkbox"/> R	
11.	Fuel cock paper filter.	R				<input type="checkbox"/> R			<input type="checkbox"/> R	
12.	Fuel cock sediment bowl cleaning	CL				CL			CL	
13.	Carburettor rubber duct	C,R					C,R			
14.	Fuel pipe	C,R	C	C	C	<input type="checkbox"/> R	C	C	<input type="checkbox"/> R	
15.	Valve tappet clearance	C,A			C,A		C,A		C,A	
16.	Non-Sealed drive chain cleaning & lubrication	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	
17.	Sealed drive chain cleaning & lubrication	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	CL,L,A	Customer to apply OKS chain lub spray at every 500 kms.
18.	Engine air breather tube	C	C	C	C	C	C	C	C	
19.	Silencer drain hole cleaning	CL		CL	CL	CL	CL	CL	CL	

3 Tick in the box after replacing the periodic parts.

Periodic Maintenance & Lubrication Chart

AVENGER
220 CRUISE

AVENGER
220 STREET

Sr. No.	Operation	Servicing	RECOMMENDED FREQUENCY							Subsequent
			1 st Free	2 nd Free	3 rd Free	Every				
			500 750	4500 5000	9500 10000	5000 Km after Previous Service				
20.	Silencer tail pipe cleaning**	CL		CL	CL	CL	CL	CL	CL	
21.	Brake cam & brake pedal pivot pin	C,L,R	C	C,L,R	C,L,R	C,L,R	C,L,R	C,L,R	C,L,R	Use AP grease.
22.	Brake lining or pad - Check wear indicator		C,R	C,R	C,R	<input type="checkbox"/>	C,R	C,R	<input type="checkbox"/>	
23.	Brake fluid level **- top up / replace	C,A,R				C,A			<input type="checkbox"/>	Use recommended brake fluid (DOT3/DOT4)
24.	Disc brake assly -- Check functionality, leakage or any other damage.	C			C		C		C	
25.	All cables & rear brake pedal-free play	C,A	C,A	C,A	C,A	C,A	C,A	C,A	C,A	
26.	Battery electrolyte level, specific gravity	C,A	C,A	C,A	C,A	C,A	C,A	C,A	C,A	Not applicable for VRLA battery
27.	Wiring harness & Battery connections- routing, tie bands & clamps tightness.	C,A,T	C,A,T	C,A,T	C,A,T	C,A,T	C,A,T	C,A,T	C,A,T	
28.	Ignition switch barrel cleaning	C,CL	C,CL	C,CL	C,CL	C,CL	C,CL	C,CL	C,CL	Use WD40 spray

3 Tick in the box after replacing the periodic parts.

Periodic Maintenance & Lubrication Chart

AVENGER
220 CRUISE

AVENGER
220 STREET

Sr. No.	Operation	Servicing	RECOMMENDED FREQUENCY							Subsequent
			1 st Free	2 nd Free	3 rd Free	Every				
			500 750	4500 5000	9500 10000	5000 Km after Previous Service				
29.	Handle bar control switches contacts cleaning	C,CL	C,CL	C,CL	C,CL	C,CL	C,CL	C,CL	C,CL	Use WD40 spray
30.	Steering play	C,A	C,A	C,A	C,A	C,A	C,A	C,A	C,A	
31.	Steering stem bearing*** & Cap steering bearing (Plastic)**	C,CL,L,R			C,CL, L,R		C,CL, L,R		C,CL, L,R	Check & replace if Damaged. Use HP Lithon RR3 grease for lubrication.
32.	Main stand & side stand pin**	CL,L			CL,L		CL,L		CL,L	Use AP grease.
33.	Swing arm pivot pin (for non silent bush)**	L		L	L	L	L	L	L	
34.	All fasteners tightness	C,T	C,T	C,T	C,T	C,T	C,T	C,T	C,T	
35.	Engine foundation silent bushes**	C				C			C	
36.	General lubrication-Clutch lever, front brake lever, kick lever.	L	L	L	L	L	L	L	L	Use AP grease.
37.	Idle speed / CO%	C,A	C,A	C,A	C,A	C,A	C,A	C,A	C,A	

3 Tick in the box after replacing the periodic parts.

Periodic Maintenance & Lubrication Chart

AVENGER
220 CRUISE

AVENGER
220 STREET

Sr. No.	Operation	Servicing	RECOMMENDED FREQUENCY							Subsequent	
			Kms	1 st Free	2 nd Free	3 rd Free	Every				
				500 750	4500 5000	9500 10000	5000 Km after Previous Service				
38.	Coolant level in expansion tank**	C,A	C,A	C,A	C,A	C,A	C,A	C,A	C,A	Use recommended 'Ready to use coolant'.	
39.	Coolant hose damage/clamps/leakage**	C		C	C	C	C	C	C		
40.	Radiator fins**	C		C	C	C	C	C	C		
41.	Spoke tightening**-Front & Rear	C,T	C,T	C,T	C,T	C,T	C,T	C,T	C,T		
42.	Front fork dust seal & Rubber bellow	CL		CL	CL	CL	CL	CL	CL		
43.	SAI, EVAP hoses - Check functionality, leakage or any other damage**	C,R	C,R	C,R	C,R	C,R	C,R	C,R	C,R	Replace if cut / damaged	
44.	EVAP drain tube cleaning**	CL	CL	CL	CL	CL	CL	CL	CL		

3 Tick in the box after replacing the periodic parts.

** As applicable to model

*** More frequent cleaning may be required while driving in dusty environment.

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

Note : Periodic parts, Oil, Coolant, Filters, All types of greases, Cleaning agents, Cables, Wear & tear parts, Rubber 'O' rings / oil seals / pipes, Gaskets to be replaced as per Periodic Maintenance and Lubrication Chart are mandatory and the same are chargeable to customer.

Non-Use Maintenance



Non-use maintenance is necessary if a vehicle remains off road for a longer duration (more than 15 days**). The correct and careful non-use 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 engine 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.
- Spray oil on all unpainted metal surfaces to prevent rusting. Avoid getting oil on rubber parts or brake liners.
- 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.

- Do not apply oil on front brake disc, to prevent rusting. If the front brake disc rusts during storage, do not attempt to clean it with soap water. The rust will go off automatically during first few application of brake.

** For Battery :

- 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 / Battery Dealer.
 - Apply petroleum jelly on battery terminals.

Preparation for regular use after storage :

- Follow daily safety checks.

Delivery Certificate

AVENGER
220 CRUISE

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FRAME NO. :

ENGINE NO. : Sold on.: _____

Customer's Name Mr/Mrs/Miss : _____

Address : _____ Contact No.: _____

I have taken possession of motorcycle along with the following items.

- | | |
|-------------------|-------------------------------------|
| 1. Owner's Manual | 5. Standard Accessories |
| 2. 2 nos of key | 6. Battery Make _____ Sr. No. _____ |
| 3. Set of tools | 7. Tyre Fr Make _____ Sr. No. _____ |
| 4. First Aid Kit | Rr Make _____ Sr. No. _____ |

The Vehicle has been delivered to my satisfaction & I have understood all terms and conditions of warranty, service schedules & maintenance tips and shall abide by them.

Dealer Code : _____

Dealer Name : _____

Address : _____

Contact No. : _____

Customer's Signature (To be filled in by the dealer)

Important - "Do not detach this page from Owner's Manual"

Warranty : Scope & Limit



Bajaj Auto Limited gives the following warranty in respect of the “**Avenger 220 DTS-i**” motorcycle manufactured by them.

Every possible care and precaution has been taken to ensure quality in respect of the material & workmanship in the vehicles manufactured by us. Bajaj Auto Limited will repair or replace at their Authorised Workshops, free of charge, part or parts there of as may be found, on examination, to have manufacturing defect within a period of **5 Years or 75,000 Kms.**, whichever occurs earlier from the date of sale subject to fulfillment of condition stipulated in part A, B & C given here under

Warranty is applicable for only first owner of vehicle.

Part A:

Warranty claims in respect of such items like shock absorbers, speedometers etc. though claimed through us, are subject to acceptance of the respective manufacturers. In all such cases the decision of the respective manufacturer will be final and binding.

Proprietary parts like tyres, tubes, battery and spark plugs are warranted by their respective manufacturers and should be claimed on them directly by the customer. Bajaj Auto Limited shall not be Liable to replace them

though their dealer will give full assistance in preferring such claims.

Bajaj Auto Limited undertake no liability in the matter of consequential loss or damage caused due to the failure of the parts. Delay, if any, at the repairing workshop in carrying out repair to vehicle shall not be a ground for extending the warranty period, nor shall it give any right to the customer for claiming any compensation for damages.

Bajaj Auto Limited reserves the right either to repair or replace the defective parts.

Where a defective part can be replaced by part/s of alternative brand/s, which are normally used by Bajaj Auto Limited in the course of manufacture, Bajaj Auto Limited reserves the right to carry out the replacement by a part or parts of any such alternative brand/s.

This warranty and any claim arising there from is subject to Pune jurisdiction only.

Part B:

No claim for exchange or repair can be considered unless the customer :

- Ensures that immediately upon detection of the defect, he approaches any nearest Authorised Bajaj Vehicle Dealers & Recommended Authorised Service Dealers with the concerned vehicle and enables him

Warranty : Scope & Limit



to remove and despatch the part / parts attributing to the manufacturing defect to the Company.

- b. Produces the Owner's Manual, in original, to enable that dealer to verify the details.

It must be expressly understood that claims forwarded directly to us by the owner / customer will not be entertained at all and such defective part/parts thus forwarded by them will lie at our factory at their own risk, and this warranty shall not be enforceable.

To avail benefits of warranty, following are mandatory

1. Availing of Initial 3 Free Services without lapse.
2. Availing paid services at subsequent 5000 kms. or 120 days from last service whichever occurs first without any lapse.
3. Availing of all above services at the Authorised Vehicle Dealers & Recommended Authorised Service Dealers.
4. Usage of only recommended engine oil "Bajaj DTS-i 10000" at specified frequency for drain interval of 10,000 kms. & engine oil level top-up at 5000 kms.
5. Replacing mandatory periodic parts such as air filter, oil filter etc. as per periodic maintenance schedule.

Part C :

Further this warranty is NOT applicable to :

1. Normal maintenance operations like brake & clutch adjustments, cleaning of fuel system, engine tune-up or such other adjustments.
2. Parts subjected to normal wear & tear like Clutch Plates, Brake Shoes, Chain, Sprockets, Fork Oil Seal, Spark Plug, Control Cables, Brake Pads.
3. Replacement of bulbs & rubber components like grommets, 'O' rings, bellows as well as filters, packings, gaskets, fasteners etc.
4. Painted parts. Only blistering or peeling off of paint film are covered under warranty. Any defect arising out of external damages or due to usage of protective covers /non recommended protective coatings, adverse atmospheric condition etc. is not allowed under warranty.
5. All consumables like Engine oil, Fork oil, Brake Oil, Grease etc. are chargeable to customer.
6. Any defect arising due to above consumables not changed as per scheduled or if used other than the recommended one.
7. Never drive your bike through flooded roads or a flooded patch, damage to the engine parts due to water entry is not covered under warranty.

Warranty : Scope & Limit



8. All chrome plated parts are prone to rust or corrosion in coastal area or in acidic environment or due to neglected cleaning etc. However chrome film peeling is covered under warranty in general atmospheric conditions. Blue/ Yellow colouration of silencer near exhaust port is permissible and hence not covered under warranty.
9. Oxidation of unpainted/painted crankcase, cylinder block, cylinder head etc. in acidic environment or in a coastal area.
10. Parts of the vehicle that have been subjected to misuse, accident, negligent treatment OR which have been used in conjunction with parts & an equipment not manufactured or recommended for use by Bajaj Auto Limited, if in the sole judgement of Bajaj Auto Limited, such use prematurely affects the performance and reliability of the vehicle.
11. Parts of the vehicle that have been altered and modified or replaced in unauthorized manner like use of wider tyres, loud silencers etc and which in the sole judgement of the Bajaj Auto Limited affects its performance and reliability.
12. **Vehicles which are not being serviced at recommended dealers as per the service schedule described or which have not been operated or maintained in accordance with the instructions maintained in the Owner's Manual.**
13. Vehicles used for any competition or race and/or for attempting to set up any kind of record.
14. Any failure arising due to use of adulterated or bad quality fuel.
Parts affected due to bad fuel quality are not covered Under warranty.
15. If additional electrical accessories such as - Remote, Bigger horn, Musical brake light etc. fitted on vehicle.
16. If the vehicle has been used for commercial purpose like Taxi or any other means of commercial transportation.

Bajaj Auto Limited reserves the right to make any changes in design or to add any improvements on the vehicle at any time without incurring any obligation to install the same on a vehicle previously supplied and sold. Also, the conditions of this warranty are subject to alteration without any notice.

This warranty is the entire written warranty given by Bajaj Auto Limited for "**Avenger 220 DTS-i**" motorcycle' and no other dealer or its or his agent or employee is authorised to extend or enlarge this warranty.

AVENGER
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AVENGER
220 STREET

BATTERY WARRANTY CARD

MAKE OF BATTERY :

MFG. CODE OF BATTERY :

SR.NO.:

TYPE OF BATTERY :

DATE OF SALE :

NAME OF OWNER AND ADDRESS :

TYPE OF VEHICLE : REG. NO.:

FRAME NO.: ENGINE NO.:

SERVICE RECORD

Sr. No.	Date	Age Mths.	Specific Gravity	Voltage	Remarks	Dealer's Stamp & Signature	* Code
1							
2							
3							
4							
5							
6							

*** Code For Remarks:**

- LL** : Low electrolyte level.
- AE** : Electrical system needs attention.
- IR** : Insufficient running of vehicle.
- CB** : Cover broken.
- BC** : Broken Container.
- PM** : Poor maintenance.
- BA** : Battery abused.

Note : Customer should insist that "Service Record" must be filled by respective authorised battery dealer as proof of specified maintenance for easy settlement of claim, if any.

TO BE FILLED IN BY BATTERY DEALERS / DISTRIBUTORS IN CASE OF CLAIM

Name of Dealer & Code : _____

Date of claim : _____ Battery Type : _____

Serial No. : _____ Date of Fitment : _____

Failure Mode (Please tick as applicable)

- | | |
|------------------------|-------------------------------------|
| • Loose connection | • Overcharge / Undercharge |
| • Internal Short | • Reverse Charge |
| • Plate Shedding | • High Specific Gravity Electrolyte |
| • Intercell Connection | • Electrolyte Contamination |
| • Does not Hold Charge | • Electrolyte Level not Maintained |
| • Wrong Assembly | • Left Lying Idle |
| • Wrong Application | |
| • Terminal Corroded | |

Claim Accepted

Claim Rejected

Details of Repair, if any _____

Note:

Please contact nearest respective authorised battery dealer for details immediately after purchase of vehicle.
