

ROYAL ENFIELD OWNER'S MANUAL

BULLET TRIALS 500 - EURO IV



FOREWORD

Congratulations! Now you are a part of the most enduring tale in motorcycling!

Bullet, introduced in 1932, the world's oldest motorcycle model in continuous production, is at the heart of the Royal Enfield's storied heritage. The Bullet Trials Works, arriving at 1948 Colmore Cup Trials with their rear swinging arm suspension, dominated the Trials competitions across Europe for the next decade and changed the way motorcycles were designed since. Hugely successful in the competitions that tested endurance & resilience, Bullet Trials Works Replicas were subsequently made available for the public and caught the interest of the army of a newly independent nation, tasked to patrol a long border of arduous terrains. To know more about this and the exciting world of Royal Enfield www.royalenfield.com

This manual will help you to operate your Bullet Trials Replica, came to be known as Trials Bullet, the right way and guide you to maintain your motorcycle meticulously. We have also provided tips on safe riding and on minor adjustments for the care of your motorcycle. Please do avail of all the services at your nearest Authorised Service Centre to make sure that your motorcycle gets the right treatment which it so deserves. Please also read through the terms and conditions of warranty and other useful information in this manual before riding into the world of pure motorcycling.

Keep riding.

NOTICE

All information in this manual is based on the latest product information available at the time of publication. Due to continuous improvements, there may be discrepancies between the information in this manual and your motorcycle. Royal Enfield reserves the right to make production changes at any time without prior notice and without incurring any obligation to make the same or similar changes to motorcycles previously built or sold.

All images shown are for reference to explain and need not to be exactly the same on the model you own. Technical specifications are subject to change without prior notice.

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Disclaimer

Applicable for all Matt finish motorcycles

1. Do not polish matt finished paint surfaces in your motorcycle as it will increase the gloss level.
2. Wash the painted parts only with plain water and do not use any strong solvents, cleaning agents or detergents.
3. Scratches, if happens on the matt finish parts cannot be touched up and corrected / removed
4. Warranty is not applicable for any matt finished painted parts of the motorcycle.
5. The Heat Resistance Coated components such as silencer pipe, exhaust etc... shall not be wiped clean with oiled cloth as it can generate smoke when the vehicle is driven and also leave patch marks.

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CONTENTS

Personal and Motorcycle Information	4	Parking	36
Safe Operating Rules	5	Periodical Maintenance Chart	37
Rules of the Road	11	Tools kit	40
Technical Specifications	13	Wheel Removal & Assembly	41
Recommended Lubricants	16	Minor Maintenance Tips	45
Safety Definitions	17	Long Trip Precautions	56
Motorcycle Identification Numbers	18	Washing Procedure	57
Location of Key Parts	19	Storage Precautions	58
Operation of Controls	22	Trouble Shooting	59
Pre-Operational Checks	26	Warranty Terms & Conditions	61
Safe & Happy Riding	27	EVAP	63
Running in Period	28	Environment Care	65
Warning Indication & Safety System	29	Service Maintenance Record	67
Starting	34	Notes	71
Gear Shifting, Riding & Stopping	35		

PERSONAL & MOTOR CYCLE INFORMATION

Name																																									
Door No./Street																																									
Locality																																									
City													State							Pin																					
Contact Nos.							Res:							Off:							Mobile :							Email :													
Engine No.																							Battery No.																		
Frame No.																							Battery make																		
Reg. No.																							Licence No.																		
Date of Sale																			Valid till dt.																						
Model																			Key No.																						
Tyre make																			Colour																						
Sold by																			Dealer Code																						

SAFE OPERATING RULES

- Before operating your new motorcycle, use only genuine Royal Enfield spare parts and accessories. Use of other parts may affect the performance of your motorcycle and render the warranty void. See your Royal Enfield Authorized Dealer for details.
- Know and respect the rules of the road. Be a safe rider for your own safety and for other road users.
- Before starting the motorcycle, check for proper operation of brakes, clutch, gear shifter, handlebar controls, tyre pressures, fuel and oil levels.



WARNING

Royal Enfield cautions you against the use of nonstandard parts such as aftermarket and modified front forks or suspensions, which may adversely affect performance and handling. Removing or altering original parts may adversely affect performance and could result in an accident causing serious injury.

DON'T smoke and please ensure that there are no open flames or sparks near the motorcycle, when refuelling OR servicing the fuel system.

SWITCH OFF mobile phones and other hand held electronic devices.

• Open the fuel filler cap slowly.

• Refuel in a well ventilated area with the engine turned off.

SAFE OPERATING RULES

DO NOT fill the tank to its brim. Please do not fuel motorcycle only at moderate speeds and only till the bottom of the filler neck in order to allow for fuel expansion. Do not ride in heavy traffic until you have become thoroughly familiar with its operation and handling characteristics under all conditions.



WARNING

Gasoline is extremely flammable and highly explosive. Use care when handling gasoline. Always stop the engine when refuelling or servicing the fuel system. Do not smoke or allow open flames or sparks near gasoline. Do not store motorcycle with gasoline in the tank, within the home or garage where open flames, pilot lights, sparks or electric motors are present. Inadequate safety precautions could cause an explosion or fire which could result in damage to property, serious injury.

DO NOT exceed the legal speed limit or drive too fast for existing conditions. Always reduce speed when poor driving conditions exist. High speed increases the influence of any other condition affecting stability and increases the possibility of loss of control.

NOTE

If you are an inexperienced rider we recommend that you obtain formal training on correct motorcycle riding techniques and become thoroughly familiar with the operation of your particular motorcycle. New riders should gain experience under various conditions while driving at moderate speeds.

SAFE OPERATING RULES



WARNING

Avoid overspeeding and never travel over the speed limit. Excessive speed may cause loss of control and could result in an accident causing serious injury.

On **DO NOT** exceed 70 MPH (110 km/h) riding oncoming motorcyclist.

On **DO NOT** exceed 55 MPH (90Km/h) when carrying a passenger or cargo.

Pay strict attention to road surfaces and wind conditions. Any two wheeled motorcycle may be subject to the following upsetting forces

- Wind blasts from passing trucks.
- Rough uneven road surfaces.
- Slippery road surfaces.

These forces may affect the handling characteristics of your motorcycle. If this happens, reduce speed and guide the motorcycle with a relaxed grip to a controlled condition. Do not brake abruptly or force the handlebar.

On Operate your motorcycle defensively. Remember, a motorcycle does not afford the same protection as an automobile in an accident. One of the most common accident situations occurs when the driver of the other motorcycle fails to see or recognize a motorcycle and turns into the path of the oncoming motorcyclist.

On Wear an approved helmet, clothing, and foot gear suited for riding a motorcycle. Bright OR light colors are best for greater visibility in traffic, especially at night. Avoid loose, flowing garments and scarves.

On It is not recommended to drive this motorcycle with pillion seat fitment / pillion rider, Failure to adhere this may cause damage to motorcycle / rider.

On **DO NOT** allow other individuals, under any circumstances, to operate your motorcycle unless you know they are experienced, licensed riders and are thoroughly familiar with the operating conditions of your motorcycle.

SAFE OPERATING RULES



WARNING

Maintain the recommended tyre pressure. Ensure the front and rear wheels are correctly aligned and the tyres are seated evenly & properly in the rims. Check for correct tightness of the spokes in the rims. Inspect your tyres periodically and replace tyres with approved tyres only. Failure to do so can lead to improper balance, abnormal tread wear, poor handling and could result in serious injury.

In emergency situations, if a temporary repair is made ride slowly with as light a load as possible. Ensure the tyre is permanently repaired or replaced.

Failure to heed this warning could result in serious injury. Safe motorcycle operation requires alert mental judgement combined with a defensive driving attitude. **DONOT** allow fatigue, alcohol or drugs to endanger your safety or that of others.



WARNING

Royal Enfield recommends replacement of any tyre punctured or damaged. In some cases small punctures in the tread area may be repaired from within the tyre. Particularly important to motorcycle stability is demounted tyre by your Royal Enfield Authorized Dealer. Speed should not exceed 60 Km/h (40 MPH) for the first 24 hours after repair and the repaired tyre should Never be used over 90 Km/h (55 MPH).

On Maintain your motorcycle in proper operating condition in accordance with the Maintenance chart in this Owner's Manual. Particular attention should be paid to tyre inflation pressure, tread condition. Pay particular attention to loose and / or broken spokes, free movement of steering system.

SAFE OPERATING RULES



WARNING

DO NOT operate motorcycle with a loose or damaged steering system, including the rear suspension system. Contact your Royal Enfield Authorized Dealer for repair of steering or suspension components. Damaged steering or suspension components may adversely affect handling which could result in serious injury.



WARNING

Regularly inspect rear shock absorbers and front forks for any defective suspension can adversely affect stability and handling which could result in serious injury.



WARNING

For your personal welfare, all the listed service and maintenance recommendations should be performed. Lack of regular maintenance at the suggested intervals may affect the safe operation of your motorcycle which could result in serious injury.



WARNING

Avoid any contact with the exhaust system. Wear clothing that will completely cover the legs while riding. The exhaust system gets very hot when the engine is running and remains too hot, even after the engine is turned off. Failure to wear proper or protective clothing could result in serious injury.



WARNING

Exhaust gases contains poisonous carbon monoxide and chemicals, known to cause Cancer, Birth Defects and reproductive defects.

DO NOT INHALE exhaust gases. Never stand close to the exhaust system of the motorcycle when the engine is running.



WARNING

Motors and batteries contain lead and lead components, acids and chemicals known to cause cancer, birth defects or other reproductive harm. Exercise extreme caution while handling a battery. Wash hands thoroughly whenever a battery is handled.

SAFE OPERATING RULES



WARNING

Consult your Royal Enfield Authorized Dealer or a competent person for any questions or problems that occur in the operation of your motorcycle. Failure to do so may aggravate an existing problem, cause costly repairs, jeopardize your safety and could result in serious injury.



WARNING

Use only genuine Royal Enfield replacement parts and fasteners tightened to the proper torque (See your Royal Enfield Workshop Manual). We caution you against the use of nonstandard parts such as aftermarket and custom made fasteners which may not have specific strength and type requirements to perform properly in the assembly and its environment. The use of any nonstandard parts, including fasteners, could result in serious injury.



WARNING

DO NOT exceed the Gross Motorcycle Weight Rating (GVWR) of your motorcycle. The Gross Motorcycle Weight Rating (GVWR) is

shown on the information plate, located on the frame Down tube. (GVWR is the sum of the weight of the motorcycle, accessories, and the maximum weight of the rider, passenger and cargo that may be safely carried.) Exceeding GVWR may lead to instability of the motorcycle, which could cause an accident and result in serious injury.



WARNING


DO NOT tow a disabled motorcycle. The steering and handling of the disabled motorcycle will be impaired due to the weight of the towline. If a disabled motorcycle must be transported, use a truck or a trailer. Towing a motorcycle may cause loss of control of the motorcycle in the front, leading to an accident resulting in serious injury.



WARNING

DO NOT pull a trailer behind a motorcycle. Towing a trailer may cause reduced braking efficiency, tyre overloading and unstable handling. Towing a trailer may cause loss of control of the motorcycle in the front, leading to an accident resulting in serious injury.

RULES OF THE ROAD

- Don Be sure all equipment required by Federal, State and local law is installed and are in good condition. Seated the influence of any other condition affecting stability and increases the possibility of loss of control.
- Don Be sure your license plate is installed in the position specified by law and is clearly visible at all times.  **WARNING**
- Don Ride at a safe speed that is consistent with the type of road surface you are on. Pay strict attention to whether the surface is : Avoid excessive speed and never travel at a speed faster than the speed limit. Excessive speed may cause loss of control of motorcycle, which could result in death or serious injury.
 - H Dry Don Keep to the correct side of the road center line when meeting oncoming motorcycle.
 - H Oily Don Always sound your horn, actuate your turn signals, and exercise caution when passing other motorcycles going in the same direction. Never
 - H Icy Don Do not pass another motorcycle going in the same direction at street intersections, on curves, or when going up/or down a hill.
 - H Wet Don Do not pass another motorcycle going in the same direction at street intersections, on curves, or when going up/or down a hill.
- Don Watch for loose debris, such as leaves, slippery substances or loose gravel that can hamper the stability of your motorcycle. Don Do not pass another motorcycle going in the same direction at street intersections, on curves, or when going up/or down a hill.
- Don **DONOT** exceed the legal speed limit or drive too fast for existing conditions. Always reduce speed when poor driving conditions exist. High speed Don At street intersection give the right-of-way to the motorcycle on your left. **DONOT** resume the right-of-way.

RULES OF THE ROAD

- on Always signal when preparing to stop, **DONOT** leave the curb or parking area without signaling. Be sure your way is clear to enter moving traffic. A moving line of traffic always has the right-of-way.
- on While turning either right or left, watch for pedestrians, animals, as well as motorcycles.
- on All traffic signs, including manual controls at intersections, should be obeyed **SLOWLY**.
- DOWN** at traffic signs near schools and **CAUTION** signs at railroad crossings. **Protect your motorcycle against theft. After parking your motorcycle, remove Ignition key from switch and lock the steering head.**
- on When intending to turn, signal at least 100 feet (30.5 meters) before reaching the turning. Be close to the center line (unless local rules require otherwise), slow down and then turn carefully.
- on **Never** jump a traffic light. When a change is imminent from GO to STOP (or vice versa) at intersections, slow down and wait for the light to change to green. **Never** run through a yellow or red traffic light.

TECHNICAL SPECIFICATIONS

ENGINE

Engine Type.....	Single Cylinder 4 Stroke, Ignition, Air cooled, Fuel injection
Bore.....	8.4 mm
Stroke.....	90 mm
Swept volume...	4.99 cc
Compression ratio...	8.5:1
Max Power.....	20.3 kw @ 5250 rpm
Max Torque.....	4.1.3 Nm @ 4000 rpm
Idle RPM.....	1150 RPM
Starting.....	Kick Start / E-Start
Air filter element	Paper element
Lubrication.....	Wet sump, Forced lubrication
Engine oil capacity	1.75 litres (First Fill only) 2.30 to 2.50 litres (subsequent refills)
Engine oil grade	5W50 API SL Grade & above, (JASOMA2)
Fuel Supply.....	Electronic Fuel Injection
Cooling.....	Natural air flow

IGNITION SYSTEM

Ignition system	Digital Electronic Ignition
Spark plug Electrode gap	0.80 to 0.90 mm
Spark plug.....	W.Q.R8DC (Bosch)

TRANSMISSION

Clutch.....	Wet multiplate (7 plates)
Primary drive...	Duplex chain
Primary ratio....	2.15 : 1
Gear box.....	Constant Mesh, 5 Speed
Gear Ratio.....	1 st 3.06:1 2 nd 2.01:1 3 rd 1.52:1 4 th 1.21:1 5 th 1:1
Final drive.....	17 Teeth (Sprocket)
Final Ratio.....	2.235:1
Drive Chain Links	102 links

TECHNICAL SPECIFICATIONS

CHASSIS		Tyre Pressure
Frame.....	Single Down Tube, using engine as stressed member	Front.....2.0.psi/1.41 kg/cm Rear.....3.0.psi/2.11 kg/cm
Suspension		Steering lock...ln. built
Front.....	Telescopic, 35mm forks, 130mm travel	Fuel tank capacity 19.5 litres approx.*
Rear.....	Twin gas charged shock-absorbers with 5-step adjustable preload, 80mm travel.	Low fuel warning 9.5 litres (approx)
Brakes.....	Hydraulic Disc Brakes Front & Rear with ABS System	Dead stock of Petrol 6.5 litres (approx) (unusable fuel)
Front.....	280.mm dia disc with twin piston caliper	* The above values are approximate and the actual fuel filling capacity will vary from the values mentioned.
Rear.....	240.mm dia disc with single piston & floating caliper	
Tyre size		
Front.....	9.0./ .90 - 19 - 52 P	
Rear.....	1.10./ .80 - 18 - 58 P	

ELECTRICALS

Generation.....	Alternator (III Phase)
System :	E-Start 12V - DC (III Phase)
Battery :	E-Start 12V, 12AH MF
Head lamp.....	12.V, H4-60/55W (Halogen)
Position Lamp...	12V, 4W
Brake/Tail lamp	12V, P21/5W

TECHNICAL SPECIFICATIONS

Parking lamp.....12V, 2W X 2 Nos.
 Speedometer lamp...12V, 3.4 W
 Hi beam indicator...12V, 1.7 W
 Neutral lamp tell.tale.12V, 1.7 W
 Turn signal tell.tale.12V, 1.7 W
 Turn signal.....12V, R.10W X 4 Nos.
 Warning Indicator Lamps 2W X 3 Nos.
 Horn.....12V, 2.5 amp (Max)
 Starter Motor.....12V, 0.90 KW



WARNING

Using bulbs / other electrical gadgets other than specified rating may lead to over loading / erratic behaviour / premature failure of electrical system.

Modifications on the motorcycle which are not approved by Royal Enfield may not only disqualify for warranty, but also affects performance of motorcycle.

DIMENSIONS

Length.....2100 .mm .
 Width.....800 .mm .
 Height.....1160 .mm .
 Wheel base.....1360 .mm
 Saddle Height.....805 .mm

WEIGHTS

Kerb weight (90% fuel).....198 Kgs.

Max. Pay load.....92 Kgs.

Luggage load carrier should not be more than 16 Kgs.

On Values / Dimensions given above are for your guidance only.

On In view of continuous improvements being done on our products, the specifications are likely to change without prior notice.

RECOMMENDED LUBRICANTS

Engine Oil	
Grade	15 W 50 API SL Engine Oil (JASOMA2)
Capacity	2.75 Ltrs. (First Fill only) 2.30 to 2.50 Ltrs. (during oil element replacement in periodic maintenance)

Front Fork Oil		Brake Fluid	
Grade	2W35	Grade	DOT 4
Capacity	195 ml/leg	Capacity	90ml

DO NOT Mix DOT 4 & other brake fluid together

CAUTION

Use of Wrong grade oil will reduce the life of the moving parts and seriously affect performance.

NOTE

Recommendation subject to change without notice.

ISO 14001 Operation Control Process

As per the guidelines in the ISO 14001 Environmental Management System, customers are advised to carry out timely replacement of Engine, Front Fork and Brake oils, ONLY through a Royal Enfield Authorised Dealer / Service Center for the safe disposal of the used oils to prevent Environmental pollution.

In case the oils are replaced privately, it is advised to ensure the old/ removed oils are collected carefully and reached to a certified disposal agency, nearest to you to safely disposing the oils.

Similarly, hazardous wastes such as old/discarded Batteries, Tyres, Tubes, Cables, Gaskets, Oil filters etc. should also be disposed off carefully and properly only through a certified disposal agency.

SAFETY DEFINITIONS

The information given under the titles : Warning, Caution and Note are for your safety and for the care and safety to your motorcycle and others. Please read these carefully and if disregarded may result in injury to yourself or others and damages to the motorcycle.



WARNING

Indicates a potentially hazardous situation. Disregarding this message may result in injury to rider or other persons.

CAUTION

This message if disregarded may result in damage to the motorcycle.

NOTE

Indicates important and useful messages for clearer understanding.

All Images shown in subsequent pages are for reference to explain and need not to be exactly the same on the model you own.

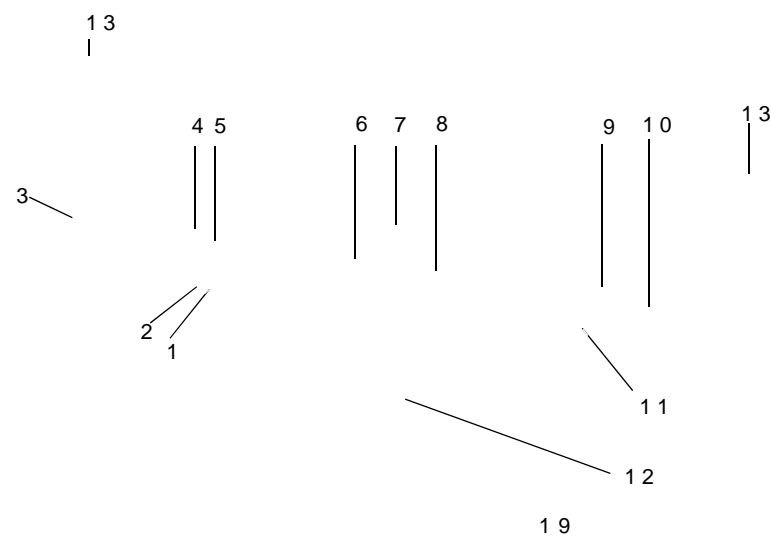
MOTORCYCLE IDENTIFICATION NUMBERS

FRAME NUMBER

ENGINE NUMBER

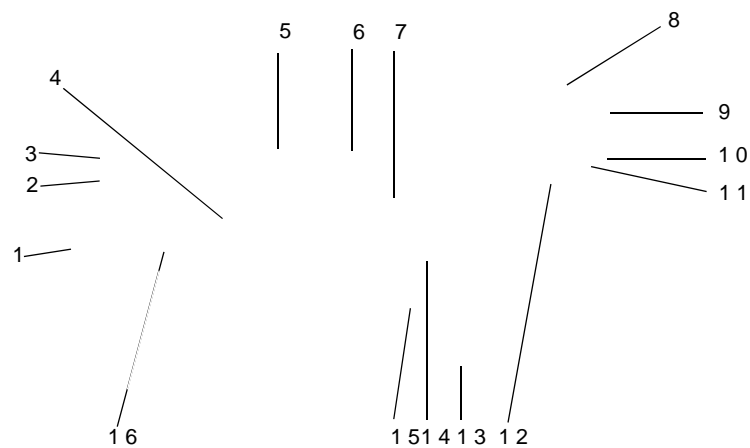
Punched on steering head tube right sidePunched on crankcase left top side.

LOCATION OF KARYT S



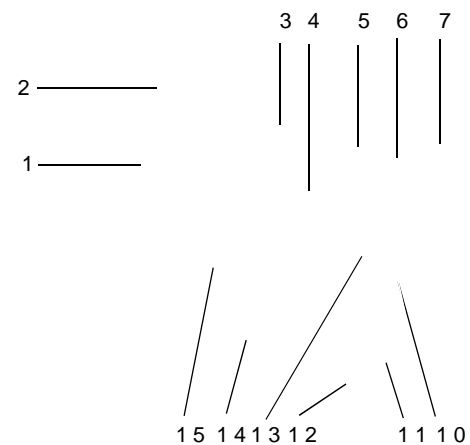
1. Horn Button
2. Turn Signal Switch
3. Cluth Lever
4. Day Flash
5. Head Lamp Dip Switch
6. Ignition Switch
7. Speedo Meter
8. Warning Indicator
9. Engine Kill Switch
10. Brake Lever
11. E-Start Switch Button
12. Petrol Tank Cap
13. Rear View Mirrors

LOCATION OF PARTS



1. Mudguard Reflector Rear
2. Right Trafficator Rear
3. Tail Lamp
4. Shockabsorber (gas filled)
5. Air filter box
6. Lid Cover
7. Throttle body
8. Pilot Lamp Right
9. Head Light
10. Number Plate Front
11. Right Trafficator Front
12. Steering lock
13. Brake Pedal
14. E-Start Motor
15. Kick Start Lever
16. Silencer

LOCATION OF PARTS

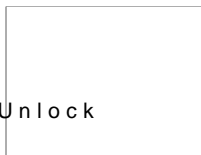


1. Left Trafficator Front
2. Pilot Lamp Left
3. Fuel Tank
4. Fuel Tap
5. Battery Box Cover
6. Seat - Rider
7. Electricals & Tool Box Left
8. Left Trafficator Rear
9. Number Plate Rear
10. Canister
11. Side Stand
12. Center Stand
13. ABS Module
14. Gear Change Lever
15. Horn

OPERATION OF CONTROLS

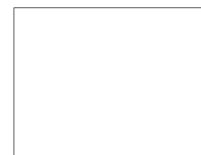
STEERING LOCK

On Turn Clockwise to lock
On Turn Anticlockwise to Unlock



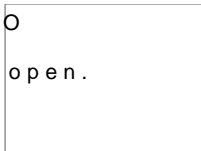
IGNITION SWITCH

OFF ON



FILTER / ELECTRICALS / BATTERY

On Turn anti clockwise to open.



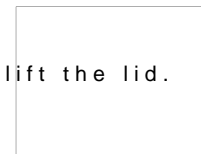
FUEL TANK CAP

OPEN

On Turn Key Clockwise & lift the lid.

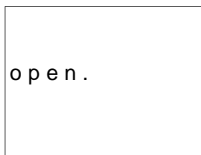
CLOSE

On Gently press it still it click into lock position.



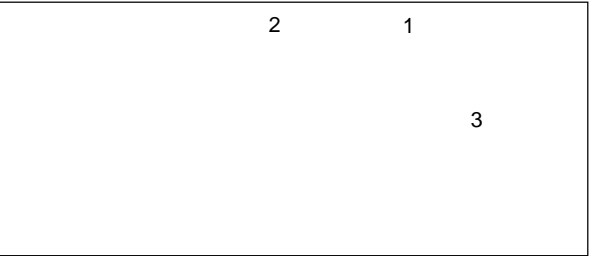
BATTERY BOX

On Turn anti clockwise to open.



OPERATION OF CONTROLS

FUEL TANK



- 1. Fuel Tank Mouth
- 2. Fuel Level Plate
- 3. Maximum Fuel Level



WARNING

Do not overfill the fuel tank. Fill upto maximum fuel level & stop filling when the fuel reaches the bottom of Splash Arrestor.

Failure to do so will lead to canister damage Or can cause fuel spill out of fuel tank.

Petrol is highly explosive. Please ensure there are no open flames or sparks nearby while refueling and fill fuel tank only in a well ventilated area.

Please ensure petrol does not spill on painted surfaces. Wipe immediately incase fuel spills over as otherwise it will leave a permanent stain on the painted surfaces.

OPERATION OF CONTROLS

NOTE

- On Key is common for ignition, petrol tank cap, steering lock, battery cover and tool boxes.
- On Key can be removed only in locked position from fuel tank, Filter box, Electrical boxes locks in OFF position from Ignition switch.
- On Turn handle bar to extreme left, before attempting to lock steering.

CAUTION

Turn off ignition switch when engine is not in running condition. Failure to do so will discharge the battery due to continuous headlamp ON.

ENGINE STOP SWITCH

Engine OFF Engine ON

E-START SWITCH

Depress & hold till engine starts.

HORN

Press

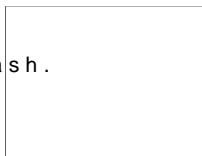
DIMMER SWITCH

High beam Low beam

OPERATION OF CONTROLS

DAY FLASH

Press for Head Light Flash.



TURN SIGNAL SWITCH

Left turn signal ON



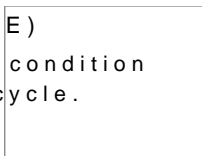
OFF (Push to off)

Right turn signal ON



MANUAL BIASSITER (CHOKE)

Apply choke in cold start condition while starting the motorcycle.

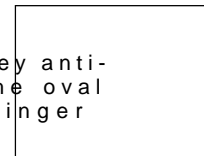


CAUTION

Choke should be used only to start engine in cold climates (less than 10°C or 50°F) first time in the morning. Riding with the Choke ON will result in Engine Misfiring, Erratic behaviour, High fuel consumption and increased Emission values.

UTILITY BOX

To remove cover turn key anti-clockwise and pull the oval cover by applying finger pressure.



PRE OPERATIONAL CHECKS

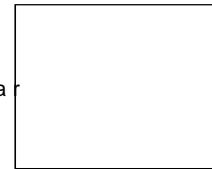
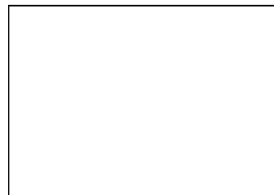
CHECK FOR

1. Petrol level in the tank and leakage if any.
2. Smooth operation and free play in Front and Rear Brake levers.

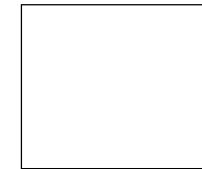
Front Brake



Rear Brake



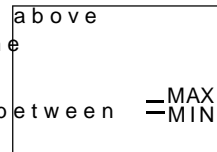
FRONT BRAKE



REAR BRAKE

7. Brake Fluid level is above the MIN mark in the master cylinder.

8. Engine Oil Level is between MAX & MIN Level.



3. Free play and smoothness of all operating controls.

4. Free movement of steering.

5. Any cuts, cracks in the tyre and correct tyre pressure.

6. Operation of all electrical equipments.

NOTE

Start engine and run for 2 minutes before checking Engine Oil Level.

SAFE & HAPPY RIDING

RIDING DRESS

- A proper riding apparel.
- Proper Riding Boots.
- Soft Leather Gloves.
- Goggles or spectacles.
- An ISI Certified helmet. (Affix light reflecting strips of stickers on the front and rear of the helmet for good visibility at night).

NOTE

A light coloured shirt enables greater visibility to other road users especially during nights.

CAUTION

Loose clothing may get caught on moving parts of the motorcycle.

SITTING POSTURE

- Correct sitting posture is a must for stable and safe riding.
- Sit Straight with your shoulders completely relaxed.
- Keep your elbows close to your body.
- Hold the handle grip close to its inner end.
- Slightly grip the fuel tank with the knees.
- Keep your toes in straight ahead direction.
- Before turning, look extensively in the rear view mirror, without turning your head.

BRAKING

- Use both front and rear brakes simultaneously for maximum braking efficiency.
- While riding on wet or bad road conditions use brakes cautiously.



WARNING

Applying any one of the brakes suddenly may cause the motorcycle to skid.

RUNNING IN PERIOD

- The Royal Enfield Motorcycle as you would be experiencing, is capable of consistent high speeds. However as with any new motorcycle, a Running In procedure is essential to help in proper Bedding In of the various moving parts in your motorcycle and to achieve optimum performance subsequently.
1. During the first 2000 Kms of run, do not exceed the speed limits as shown in the table below.
 2. Do not exceed maximum specified payload.
3. Warm up the engine for a few minutes at idling speeds to allow engine oil to lubricate all the moving parts in the engine before riding the motorcycle.
4. Avoid full throttle operation and do not ride at constant throttle continuously. Vary the speed by 10% while riding.
5. Avoid sudden accelerations and racing starts.

Gear \ Motorcycle Speed	First 500 kms	501 - 2000 kms
1	15 KMPH	20 KMPH
2	25 KMPH	30 KMPH
3	30 KMPH	40 KMPH
4	45 KMPH	55 KMPH
5	60 KMPH	70 KMPH

WARNING INDICATORS & SAFETY SYSTEMS

YOUR MOTORCYCLE IS FITTED WITH THE FOLLOWING WARNING INDICATORS AND SAFETY SYSTEMS:

1. LOW FUEL INDICATOR

The low fuel indication in the small meter will glow, if the fuel level in the fuel tank is approximately 3.5 litres.

Please ensure the motorcycle is not used with the low fuel indicator lamp ON continuously. It may not only result in the motorcycle running out of fuel. BUT will also cause serious damage to the fuel pump. Please refuel as soon as the low fuel indication comes ON.

A Malfunctioning Indicator Lamp (MIL) is provided in the small meter.

When both the Ignition & Engine kill switch is "ON" and after vehicle is started, the MIL will glow for few seconds and switch OFF, this indicates that all the functions of Electronic fuel injection (EFI) system is functioning normally.

In the event of any malfunction in the EFI System the MIL will glow continuously. It is recommended to take the motorcycle to a nearest Royal Enfield Authorized service station for a detailed inspection and correction of the EFI system.

WARNING INDICATORS & SAFETY SYSTEMS

3. ANTI-LOCK BRAKING SYSTEM (ABS)

Anti-Lock Braking System (ABS) will help prevent the brakes from locking the wheels, during sudden application of the brakes at high speeds. This will help the rider to have better traction and control over the motorcycle and prevent the motorcycle from skidding which can cause a accident.

In the event of sudden and hard application of the brakes by the rider, the sensors in the braking system will signal the ABS moderator to momentarily and continuously reduce the hydraulic pressure and thereby prevent the brakes from locking the wheels while reducing the speed of the vehicle. This will help the rider to control the motorcycle.

An ABS indicator lamp is provided in the console (as shown in adjacent image) to warn the rider in the event of any malfunction of the ABS.

When the ignition and kill switch are switched 'ON', the ABS sign light up and remain 'ON' till the motorcycle attains a speed of 5 Kmph (3MPH) and switch 'OFF'. This indicates the ABS is working properly. In the event the lamp does not switch 'OFF' and remains continuously 'ON' at higher speeds, it is recommended not to drive the motorcycle and get the brake system inspected and corrected through a nearest authorized Royal Enfield Distributor. Failure to do so can result in a serious injuries and loss of life.

WARNING INDICATORS & SAFETY SYSTEMS

CAUTION : (ABS)

Always ensure that you ride well within the legal speed limits.

ABS is a safety feature to help prevent locking of wheels during sudden application of brakes. It is by no means a substitute for good riding practices and anticipatory braking. Failure to adhere to the above can cause an accident resulting in serious injuries and loss of life.

Please ride carefully and apply brakes cautiously, especially while cornering. ABS cannot estimate the weight shifts and momentum of the motorcycle while negotiating a corner and therefore prevent skidding due to loss of traction.

Please anticipate the stopping distance required for the speed of travel and apply brakes well in advance so as to bring the motorcycle to a safe stop.

Please apply both brakes to stop - front brake momentarily earlier, followed by rear brake, to have better traction and control of the motorcycle.

WARNING INDICATORS & SAFETY SYSTEMS

DO S & DON T S : (ABS)

DO S	DON T S
<p>Don While starting the engine do check the ABS indicator. It comes ON and switches OFF when the vehicle speed exceeds 5 km/h (3.1 mph).</p>	<p>Don DO NOT RELEASE the brake lever/pedal when pulsations are felt during hard application of the brakes in an emergency situation. The pulsations only indicate that the ABS is activated.</p>
<p>Don Please check the brake fluid at MAX level in the front and rear brake master cylinders and leak in the brakes systems.</p>	<p>Don DO NOT APPLY only the front OR rear brake as it can lead to inefficient braking.</p>
<p>Don Apply both the brakes simultaneously for maximum efficiency while braking.</p>	
<p>Don In the event of the ABS indicator remaining continuously ON please take the motorcycle to a nearest authorized Royal Enfield service station to inspect the brakes system control of the vehicle.</p>	

WARNING INDICATORS & SAFETY SYSTEMS

4. ROLL OVER SENSOR

In the event of motorcycle falling over on either of its sides with the engine running and the gears engaged the Roll over sensor will "disable" both the ignition and fuel systems and switch 'OFF' the engine. This is to prevent any damage to the motorcycle and its rider. To reset the Roll over sensor and reactivate the ignition and fuel systems.

• Switch OFF both ignition & stop switches, wait for a few seconds and switch ON the Ignition and stop switch again, to start the engine.

• Ensure the motorcycle is made upright and is on its center stand.

• Ensure gears are in correct neutral and the neutral lamp is glowing in the instrument console.

STARTING

On Ensure Gear is in Neutral position and the Neutral lamp is glowing in the speedometer. **USING THE KICK STARTER**
To shift into neutral, move the motorcycle back and forth slightly while simultaneously shifting the gear.

CAUTION

Never accelerate the engine immediately after a cold start. The engine should be allowed to run slowly for 15 to 30 seconds. This will allow the engine to warm up and let oil reach all surfaces needing lubrication. Failure to adhere in damage to the engine.

NOTE

It is mandatory, necessary to depress and hold the Manual Bi-starter for a minimum of one minute when starting the engine for the first time in cold morning, every time when the temperatures are below 10 deg C, and at higher altitudes to keep the engine idling RPM steady.

As soon as the engine sufficiently warms up then Manual Bi-starter should be released.

On Warm up engine for 2 minutes -until idling is consistent.

On Slowly Crank Engine with the Kickstarter lever till a resistance is felt in the lever. Slightly crank slowly and further till the compression eases over. Release Kickstarter lever to enable it to come to its top position.
On Apply a powerful swinging Kick on the lever to start the engine. It may be necessary to open the throttle, very slightly, when starting on choke/first time in the morning.

On Release Choke if applied and allow Engine to run at idling speed for minutes.

USING ELECTRIC START

On Depress and Hold the Clutch Lever.

On Press Starter Button and hold till Engine starts. Do not release the button before Engine starts.

GEAR SHIFTING, RIDING & STOPPING

NOTE

- Release the Starter button as soon as the Engine starts.

To stop the motorcycle, close the handlebars, front and rear brakes. Simultaneously, shift gears into neutral just before the motorcycle comes to a complete stop.
- If Engine does not start, wait for 30 seconds before pressing the starter switch.

A Clutch switch is provided in the system for the safety of the rider. When the motorcycle is in gear, the motorcycle cannot be started. To start in gear depress the clutch lever and press Starter button to start engine.
- Warm up engine for 2 minutes.

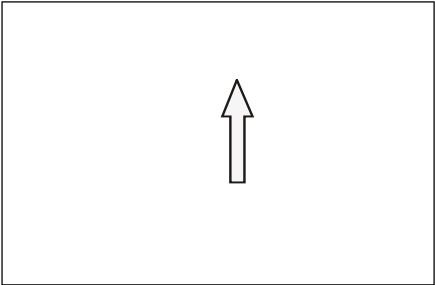
Turn the ignition switch to OFF position.
- Depress clutch lever.

Prior to starting, check to see if the low fuel indicator is glowing continuously. Low fuel indication will glow continuously, if the fuel level in tank is below 3.5 litres approx.
- Press gear pedal with toe to engagest gear.
- Gently open throttle and release clutch lever simultaneously. If clutch is released suddenly, the engine may stall and cause the motorcycle to move with a jerk.
- To shift to 2nd higher gears close throttle, depress clutch lever and press the gear pedal with heel.

PARKING

PARKING MOTORCYCLE ON CENTER STAND

- Select a firm, flat surface.
- Hold handle bar straight.
- Lower center stand, such that, both the motorcycle and the center stand are resting on firm ground.
- Apply pressure on the fulcrum lever on the center stand and pull motorcycle backward.



PARKING MOTORCYCLE ON SIDE STAND

- Select a firm, flat surface.
- Extend side stand. Tilt the motorcycle to the left, till it is supported firmly.

CAUTION

- When side stand is in extended position.
- a) Engine will start if vehicle is in neutral, but will cut-off (ignition and fuel) when gear is engaged.
 - b) Engine will not start if gear is engaged already.

WARNING

Ensure both the stands are retracted fully before riding the motorcycle.
Please exercise extreme care while parking and ensure it is parked firmly to avoid the motorcycle from falling over and causing injury to you or to others and damage to the motorcycle parts.

PERIODICAL MAINTENANCE

The maintenance schedule detailed here will help you maintain your Bullet 500 Trials Motorcycle meticulously and to get a long trouble free service. The schedule provided herein is based upon average riding conditions and indicates the Kms at which regular inspections, adjustments, replacements and lubrications are to be carried out. The frequency of the maintenance must be shortened depending upon the severity of the driving condition or if the motorcycle is used in a very dusty environment. Contact the nearest Royal Enfield Authorised Dealer / Service Center for expert advice and to carry out the required maintenance.

Sl. No.	DESCRIPTION	SCHEDULE											
		Kms (x 1000)	3	6	9	12	15	18	21	24	27	30	
		Miles (x 1000)	2	3.7	5.6	7.5	9.5	11.2	13	15	17	18.75	
		Months	1.5	3	6	9	12	15	18	21	24	27	30
1	Engine Oil		R	I	R	I	R	I	R	I	R	I	R
		Check level at every 1000 Kms or earlier as required											
2	Engine oil filter element		R		R		R		R		R		R
3	Engine sump filter (oil strainer)		C		C		C		C		C		C
4	Magnetic drain plug under gear box and secondary drain plug under crankshaft in crankcase right					C		C		C		C	
5	Spark plugs		C&A	C&A	C&A	C&A	A	R	C&A	C&A	C&A	C&A	A
6	HT leads for crack		I	I	I	I	I	I	I	I	I	I	I
7	Fuel hose & clip/Injector O Ring/Seal Ring		I	I	I	R	I	I	I	R	I	I	I
8	Fuel Pump (under tank) Mounting		Check for mounting screw tightness in all services										
9	Accelerator & Throttle pulley cables free play		A	A	A	A	A	A	A	A	A	A	A

PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	SCHEDULE											
	Kms (x 1000)	3	6	9	12	15	18	21	24	27	30		
	Miles (x 1000)	2	3.7	5.6	7.5	9.5	11.2	13	15	17	18.75		
	Months	1.5	3	6	9	12	15	18	21	24	27	30	
10	Rubber hose, Air filter to Throttle body	I	I	I	I	R	I	I	I	R	I	I	
11	Rubber hose, Inlet manifold / Adaptor	I	I	I	I	R	I	I	I	R	I	I	
12	Evaporative Emission Equipment rubber hoses	I	I	I	R	I	I	I	I	R	I	I	
13	Air filter paper element	C	C	C	C	R	C	C	C	R	C	C	
14	Inlet/Exhaust valve seating (compression/vaccum test)	I										I	
15	Cylinder head (Combustion chamber)												D
16	Clutch Cable / lever free play	Adjust every 1000 Kms or earlier as required											
17	PAV pipes & hose clip	I	I	I	I	I	I	I	I	R	I	I	
18	Rear brake pedal pivot	L	L	L	L	L	L	L	L	L	L	L	
19	Battery terminals (apply petroleum jelly)	C	C	C	C	C	C	C	C	C	C	C	
20	Earth wire eyelet contact					I						I	
21	Front Fork oil / leak	I	I	I	R	I	I	R	I	I	R	I	
22	Rear Wheel Drive Chain	Lubricate & Adjust every 1000 Kms/Clean, Lubricate & Adjust every 3000 Kms or earlier as required											
23	Rear brake pedal free play	Adjust every 1000 Kms or earlier as required											
24	Rear brake cam			L		L		L		L		L	
25	Steering ball races play	I	A	L	A	L	A	L	A	R	A	L	

PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	SCHEDULE															
		Kms (x 1000)	3	6	9	12	15	18	21	24	27	30	Miles (x 1000)	2	3.7	5.6	7.5
		Months	1.5	3	6	9	12	15	18	21	24	27	30	1.5	3	6	9
26	Spokes tightness / Wheel rim run out frndt & rear						I		I		I						
27	Swing Arm pivot bush & spacer			L			L		L		R						L
28	Rear wheel cush rubbers						I&R				I&R						
29	Tyre wear pattern (Front & Rear)		I	I	I	I	I	I	I	I	I	I					
30	Front Disc Brake Oil level check		I	I	I	I	I	R	I	I	I	I					R
31	Pivot-Side Stand, Center Stand, Pillion Foot Rest		I	I	I	I	L	L	L	L	L	L					L
32	Throttle body / Injector	*Carbo Cleaner / Carb Click or Fuel Line Cleaner Spray Every 6000 Kms or 6 Months whichever earlier															
33	Front brake hose & Banjo Bolt		I	I	I	I	I	I	I	I	I	I					R
34	Hand levers & kick starter lever pivot	Lubricate every 1000 Kms or earlier as required															
35	Fuel filter in fuel pump		C					R									R
36	Clutch cable		I	I	I	R	I	I	R	I	I	R					I
37	Accelerator cable		I	I	I	R	I	I	R	I	I	R					I

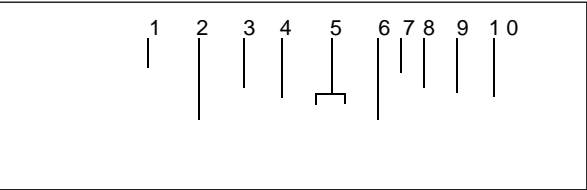
A : Adjust C : Clean D : De-carbonise I : Inspect L : Lubricate R : Replace

NOTE

For Maintenance after 30,000 Kms, Please repeat the same frequency specified above, in consultation with a Royal Enfield Authorised Dealer / Service Center.

TOOLS KIT

The tool kit is located in the left side Electrical box of the motorcycle. Technician should familiarise yourself with the minor maintenance of the motorcycle before attempting to carry out the same.



S.No.	Description	Qty.
1.	Tool bag	1
2.	Box spanner 21 X 24	1
3.	Screw driver O6 X 160	1
4.	Double end spanner 14 X 15	1
5.	Double end spanner 10 X 12	2
6.	Tool- Spark plug	1
7.	Tommy bar	1
8.	Tubular spanner 12 X 13	1
9.	Single end ring spanner - 17	1
10.	Extension tube	1

WHEEL REMOVAL ASSEMBLY

FRONT WHEEL REMOVAL

- Place the motorcycle on its center stand on a firm and flat surface.
- Provide a suitable support below the front wheel the engine such that the front wheel is about 4 inches (10 cms) above the ground.
- Disconnect speedo cable.
- Loosen the pinch bolt on the right side fork end.
- Hold the axle on the right side and loosen the axle nut on the left side.
- Remove the axle nut and washer.
- Tap the axle out gently from the left side and remove completely from the right side.
- Slide out the wheel from the fork legs along with the speedo drive, and spacer on the left side.
- Remove the speedo drive, small spacer on the right side and stepped spacer on the left side of the wheel hub.

CAUTION

- Do not depress the front brake lever when wheel is removed as this will result in the brake pads coming too far out of the brake caliper.
- Place a 4 mm thick wooden piece or cardboard sheet between the brake pads to avoid pads activation in the event the front brake lever is accidentally depressed.

FRONT WHEEL REASSEMBLY

- Remove the wooden piece / card board sheet placed between the brake pads.
- Locate small spacer and speedo drive over the wheel hub on the right side.

WHEEL REMOVAL ASSEMBLY

- ðn Locate stepped spacer in the left side of the hub with its larger face outside.

ðn Hold the axle from the right side and tighten nut on left side to a torque of 7 KgM (70 Nm).
 - ðn Locate front wheel between the fork ends ensuring the spacer and the speedo drive (70 Nm) fall off and the brake disc is correctly positioned between the brake pad.

ðn Ensure the peg in the speedo drive is correctly positioned in the slot in the right side fork end.
 - ðn Hold the pinch bolt and tighten the U-Nut on the right side fork end.
- Insert axle through the right side fork end and gently tap it in fully.
- ðn Locate washer and nut on the left side.

ðn Rotate the wheel and check for smooth rotation.
 - ðn Connect the speedo cable to speedo drive and check for proper working of speedo meter.
 - ðn Depress brake lever 2 or 3 times to check front brake efficiency.

WHEEL REMOVAL/ASSEMBLY

REAR WHEEL REMOVAL

- Place the motorcycle on center stand on a firm and flat surface.
- Note the alignment index marks in the both side of swing arm.
- Remove wheel spindle from the left side as shown.
- Remove the brake hose pipe from the swing arm clips.
- Remove the caliper assembly with bracket by pulling out from the swing arm slot.
- Place the wooden piece/card board sheet in between the brake pads.
- Remove the left side spacer from rear wheel hub.
- Tilt motorcycle to right side and slide out rear wheel.

REAR WHEEL REASSEMBLY

- Ensure the four Cush rubbers are in position inside the rear wheel hub.
- Tilt motorcycle to right side and insert the wheel assembly between the swing arms.
- Position the rear wheel with cush rubber on the rear chain sprocket.
- Fix the left side spacer in rear wheel hub.
- Remove the wooden piece / board sheet in between the brake pads.
- Insert the caliper assembly with bracket by matching the slots given in the caliper and swing arm.

WHEEL REMOVAL ASSEMBLY

NOTE

Ensure that brake disc is located in between the brake pads.

On Align the caliper bracket, wheel and swing arm holes all in one line.

On Insert and tap the rear wheel axle gently from left side.

On Fix the brake hose pipe in swing arm clips properly.

CAUTION

Do not force the spindle into the wheel as the threads may get damaged. Tap it through the wheel gently.

On Note the alignment index marks in the both side of swing arm.

CAUTION

Please check the brake hose pipe routing from Reservoir to Master cylinder, Master cylinder to Rear wheel caliper.

There should not be any twist or pinch in routing which may affect braking performance.



WARNING

Ensure the motorcycle does not come off center stand while assembling / disassembling the wheel assembly. Failure to adhere could result in damage or serious injury.

MINOR MAINTENANCE TIPS

The following simple maintenance activities will help in maintaining your motorcycle. However for an elaborate maintenance, we recommend you clear the drive chain carefully. Apply chain lubricant touch with a Royal Enfield Authorised Dealer. See also

CONTROL CABLES

Lubricate after water washing motorcycle during rainy conditions.

HAND LEVER PIVOTS

Wipe the area free of dirt / grease.

Apply a few drops of oil on the pivots.

CENTER / SADDLE PIVOTS

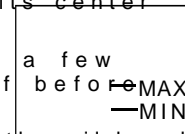
Apply a few drops of oil on the pivots after cleaning the area of dirt.

DRIVE CHAIN

Clean the chain carefully. Apply chain lubricant simultaneously rotating the rear wheel. Wipe off the excess lubricant.

OIL LEVEL INSPECTION

- Place motorcycle on its center stand on a firm surface.
- Warm up engine for a few minutes & switch off before checking oil level.
- The level is correct if the oil level is in the middle of the oil level window.
- Top up only with recommended Engine oil.



CAUTION

Use of wrong grade or spurious oil can seriously affect motorcycle performance & damage to moving parts.

MINOR MAINTENANCE TIPS

SPARK PLUG

CLEANING AND ADJUSTING SPARK PLUG

- Remove the spark plug cap from the spark plug.
- Remove spark plug using the plug spanner and tommy bar.
- Clean the insulator tip and electrodes of the plug carefully.
- Check and set the electrode gap between 0.80 to 0.90 mm.

Gap 0.80 to 0.90 mm.

- Refit the spark plug on the cylinder head and refit the spark plug cap on the spark plug.

INSPECTION OF TYRES AND WHEELS

- Inspect the tyres periodically for tread wear, cracks and cuts.

Minimum tread depth :

Front tyre : 1 mm Rear tyre : 2 mm

- Check and remove stone, splinters, nails or other particles embedded in the tyre treads.

- Periodically inspect wheels for spokes breakage and wheel rim run out.

- Check proper seating of the tyre beading on the rim whenever the tyre is reassembled.

- Use only recommended tyres & tubes, inflated to correct air pressure.

	Front	Rear
Solo	1.41 kg/cm ² (20 PSI)	1.1 kg/cm ² (16 PSI)
With luggage	1.55 kg/cm ² (22 PSI)	1.2 kg/cm ² (17 PSI)

MINOR MAINTENANCE TIPS

BRAKE FLUID

Check if oil is below MIN level. To top up, remove cover and diaphragm, then top up with oil of the specified.



FRONT BRAKE

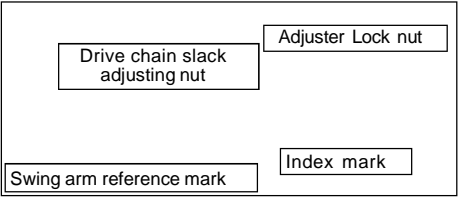


REAR BRAKE

CAUTION

Brake fluid is highly corrosive and can cause damage to painted parts. Please ensure that brake fluid does not spill on any part of the motorcycle. In the event of a spill, please clean the area immediately with a soft cloth (preferably a wet cloth) to avoid damage.

DRIVE CHAIN TENSION (Only 25 - 30m)



MINOR MAINTENANCE TIPS

To adjust the free play:

• Ensure the ground level & firm and place the motorcycle in its centre stand.

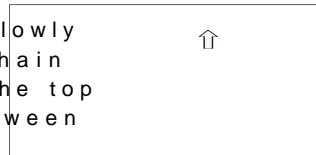
• Loosen rear wheel spindle nut.

• Loosen rear sprocket stub axle nut.

• Loosen lock nuts of the chain adjuster ends of the swing arm.

• Tighten / loosen the adjuster nut on swing arm end, to reduce / increase free play.

• Rotate wheel slowly and check chain free play at the top run to be between 25 - 30 mm.



• Note the matching index marks on right swing arm and chain adjuster and tighten / loosen adjuster nut on left swing arm side, to ensure the marks on both sides are at the same position.

• Tighten the lock nuts against the adjuster nuts, taking care not to disturb the adjuster nut settings.

• Tighten rear sprocket stub axle nut and wheel spindle nut to torque of 7 Kg-m.



WARNING

Chain slackness beyond 30mm will lead to chain slippage.

Maintain drive chain slackness within the specified limits at every 1000 kms interval.

Please Check the front and rear wheels are correctly aligned, after the chain adjustment.

MINOR MAINTENANCE TIPS

BATTERY MAINTENANCE

- The Motorcycle is provided with 12V-12Ah MF Battery.
- Periodically check the battery for cleanliness and corrosion free terminals.

REMOVAL OF BATTERY FROM THE MOTORCYCLE

- The battery is located on the left side of the motorcycle near the electrical box.
- Ensure motorcycle is parked on its center stand, in a well ventilated area.
- Ensure the ignition switch and engine stop switch are in OFF position.
- Insert the key into the battery cover lock, turn anticlockwise and hold.

- Remove the battery cover outwards while releasing the cover from the lock peg on top.
- Disconnect the -VE Terminal first and then +VE terminal.
- Remove the rubber straps and take out the battery.

Positive terminal Negative terminal

ASSEMBLY OF BATTERY ON MOTORCYCLE

- Locate the battery in the carrier.
- Secure the battery to the carrier with the rubber strap.
- Connect the +ve first and then -ve terminal to the respective cables and smear petroleum jelly on the terminals, and cover the terminals with the rubber sleeve provided on the respective cables.
- Position the battery cover over the lugs on top and close the cover.

MINOR MAINTENANCE TIPS

On Turn the key anticlockwise and push the locator and turn the key clockwise such that the cover is locked in position.

On Release Key and remove from the lock

On It is not necessary to check the battery level or add distilled water as the battery is maintenance free (Sealed type)

On Clean the wire terminals free of corrosion and keep the terminals coated with petroleum jelly.



WARNING

Always disconnect the negative (-) battery cable first and then the positive (+) cable while removing the battery connections. If the positive (+ve) battery cable should contact terminal with the negative, (-ve) cable installed, the resulting sparks may cause a battery explosion which could result in serious injury.



WARNING

Battery terminals and internals contain lead components, known to cause cancer defects or other reproductive harm. Always wear approved protective face shield, nitrile gloves, and protective clothing when working with batteries. KEEP BATTERIES AND OUT OF REACH OF CHILDREN.

NOTE

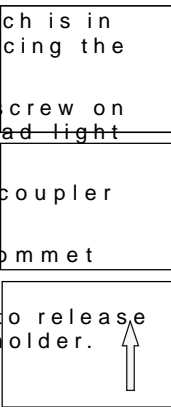
1. Usage of frequency for motorcycle is very important for battery to be in good performance condition. If the motorcycle is being used very sparingly and the terminals are not disconnected the battery is bound to lose its charge and result in a dead battery.
2. Your Battery is a maintenance free type and can be permanently damaged if the cap strip is removed.

MINOR MAINTENANCE TIPS

CHANGING ELECTRICAL COMPONENTS ASSEMBLING THE HEAD LAMP BULB

HEADLAMP BULB REPLACEMENT

- Make sure the Ignition switch is in OFF position when replacing the bulb.
- Loosen the rim holding screw on top and take out the head light reflector.
- Disconnect the wiring coupler over the bulb.
- Remove the rubber grommet from the bulb.
- Press the clip by thumb to release the free end from bulb holder.
- Pull out the bulb.

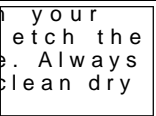


- 1. Refix the new halogen bulb into reflector unit of the headlamp.
- 2. Gently press the bulb holding clip and lock the free end in its slot.
- 3. Fit the rubber grommet.
- 4. Connect the electrical connections carefully & assemble the headlamp in the reverse order of dismantling.



CAUTION

Never touch the bulb with your fingers. Finger prints will etch the glass and decrease bulb life. Always hold the bulb with paper or clean dry cloth during handling.



MINOR MAINTENANCE TIPS

TAIL LAMP BULB

• Remove the tail light glass by unscrewing its mounting screw.

• Remove the tail light bulb from its holder.

• Replace the bulb.

• Assemble back the tail light in the reverse order of dismantling.

TRAFFICATOR BULB

• Remove the screws & take out trafficator glass cover.

• Press bulb gently & Turn anti-clockwise to take out the bulb.

• Position the new bulb inside holder, ensuring that the pins in the bulb, match with the slots in the holder.

• Gently press the bulb and turn clockwise to lock the bulb in the holder.

• Refit the trafficator glass and screws, ensuring the lens slot / cut mark is at the bottom.

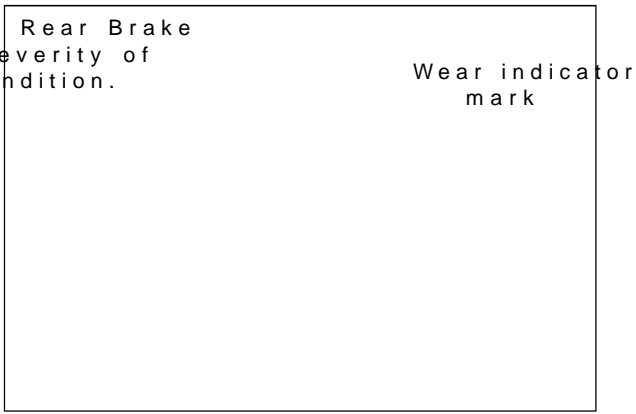
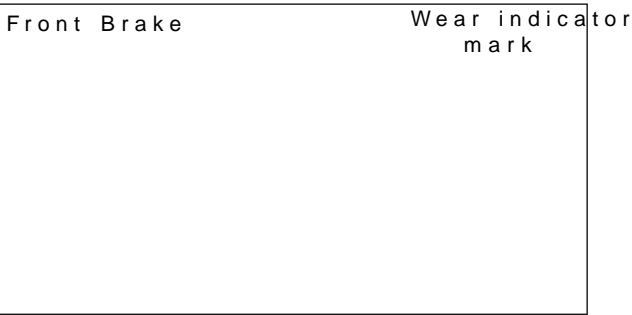
NOTE

Make sure the Ignition switch is in OFF position when replacing the bulbs.

MINOR MAINTENANCE TIPS

BRAKE PAD WEAR

on Brake pad wear depends upon the severity of usage, the type of riding and road condition.



Check the wear indicator mark on each pad. If either pad is worn to the wear indicator mark. Replace both pads as set. Visit royal enfield dealer for this service. Visit royal enfield dealer for this service.

MINOR MAINTENANCE TIPS

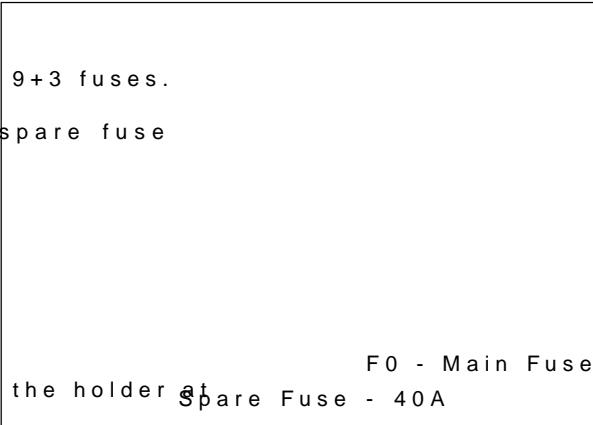
FUSE & CARRIER

- Open the left side Tool box.
- The fuse holder is located inside with 9+3 fuses.
- Replace the required fuse with the spare fuse available in the carrier.

NOTE

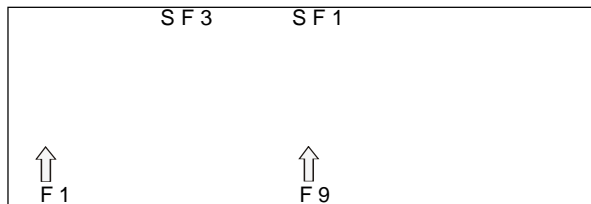
Please ensure to replace a spare fuse in the holder at the earliest opportunity.

RELA STARTER - FUSE BO



MINOR MAINTENANCE TIPS

HARNESS MAIN CABLE FUSE BOX



NOTE

Do not use a fuse different rating from that specified.

NOTE

F2 Tail Lamp Fuse - 5A - Tail Lamp Bulb - 5A.

F3 Ignition Fuse (EFI) - 15A - Relay Coil, Ecu, Ignition Coil, Fuel Pump, Injector, O2 Sensor, Exai Solenoid and Diagnostic Tool.

F4 - Signalling Fuse - 10A - Neutral Switch, Flasher, Brake Switch and Horn.

F6 Lighting Fuse - 15A - Headlamp Low & High, Speedo General illumination, Position Lamp, Pilot Lamp LH and RH.

Fuse	Description	Rating
F1	CHARGING FUSE	25A
F2	TAIL LAMP FUSE	5A
F3	IGNITION FUSE (EFI)	15A
F4	SIGNALLING FUSE	10A
F5	SPARE FUSE	5A
F6	LIGHTING FUSE	15A
F7	ABS MAIN 1	15A
F8	ABS MAIN 2	10A
F9	ABS IGNITION	5A
SF1	SPARE FUSE	10A
SF2	SPARE FUSE	15A
SF3	SPARE FUSE	25A

LONG TRIP PREPARATIONS

Checks prior to the commencement of long journey

- Service the motorcycle at a Royal Enfield Authorized Service Dealer / Service Center.
- Ensure sufficient quantity of petrol in the fuel tank for the journey planned.
- Check and correct tyre pressure if necessary.
- Bulbs for headlight, trafficator light, rear tail lamp and Mini blade fuse (25, 15, 10 & 5 Amps).
- Accelerator, Clutch and Front brake cables.

Checks after every 1500 kms of run

- Any loose fasteners.
- Condition of the tyres.
- Electrolyte level in the battery.
- Correct oil level in engine.
- Working of all lights and horn.
- Proper drive chain tension.
- Rear chain master link lock assembly.
- Insulation tape.
- Spark plug, Spark plug cap, Fuel hose.
- Spare tubes.

WASHING PROCEDURE

PRECAUTIONS

- Wash motorcycle when the engine is cold.
- Cover the silencer, tail pipe, carburetor and control cables with suitable plastic bags and tie it firmly to prevent water entry.
- Remove ignition key and seal key hole using adhesive tape.
- Brush engine area with a solvent to remove dirt or grease.
- Use low pressure jet of water to clean.
- Never spray water with great force on head lamp, speedometer, flasher lights, front and rear wheel hubs, electrical connections and wires, control cables, carburetor, spark plug, battery etc.
- Do not apply any corrosive solvent on painted surfaces or rubber parts.
- Use luke warm water and mild detergent on the painted components to remove dirt, etc.
- Rinse motorcycle thoroughly with plain water after using the detergent.
- If possible, use compressed air and blow off water particles from the obscure areas of the motorcycle, electrical connections etc.

- Once the motorcycle has been ridden in salty conditions or near coastal areas it is recommended to wash your motorcycle with cold water. Please do not use warm water for washing as it may damage the motorcycle due to chemical reaction with the salt. After washing process once the motorcycle is completely dry it is recommended to apply anti corrosion spray on all the metal and chrome plated areas to protect the parts from corrosion.
- It is recommended not to apply the anti-corrosion spray on the brake discs.

AFTER WASHING

- Ensure the motorcycle is thoroughly dry by wiping with a clean soft absorbent cloth or chamois leather.
- Remove all plastic bags and adhesive tapes.
- Lubricate control cables, pivot and rear chain with lube oil.
- Start the engine and allow to run at idling speed for a few minutes to warm up engine.
- Drive the motorcycle slowly, applying both brakes intermittently to dry up the water in the brake shoes.

STORAGE PRECAUTIONS

- Incase your Motorcycle is not going to be used for the battery. Before refitting the battery in month or more, the following precautions should be taken.
- Get the motorcycle service through a Royal Enfield workshop / battery dealer. Authorised Dealer / Service Center.
 - Drain fuel tank and fuel line.
 - Keep the fuel tap in closed position and spray engine oil inside the fuel tank to prevent rusting.
 - Remove spark plug. Pour in about 25ml of clean engine oil through spark plug hole. Close the hole and crank engine several times and refit spark plug.
 - Clean rear chain thoroughly and apply a thin film of lub oil.
 - Remove battery from the motorcycle. Clean the terminals free of corrosion and apply petroleum jelly to terminals.
 - If the motorcycle is not used for a month or longer. It is advised to disconnect battery terminals and
 - Store the battery in a cool, dry and well ventilated place.
 - Cover the silencer with plastic bags to prevent moisture entry. Set the motorcycle on its center stand.
 - Apply anti rust solutions on all plated parts. Take care not to apply this solution on rubber or painted parts.
 - Store motorcycle in a clean covered area free - of moisture and dust.
 - For re-use after storage, it is preferable to get the motorcycle prepared through a Royal Enfield Authorised Dealer / Service Center to ensure the motorcycle is restored to its peak operating condition.

TROUBLE SHOOTING

We have listed below a few basic checks in case your motorcycle is not functioning. If in case the problem is not rectified after these checks, it is necessary to get the motorcycle checked by an Enfield Authorised Dealer for service. Do not attempt to rectify the problem and to ensure trouble free performance.

Symptom	Observations	Check for / Remedy
Engine Does not start	1. Ignition/Engine stop switch is in STOP position.	Switch Ignition / Engine stop switch.
	2. Very low / No fuel in the fuel tank.	Check Fuel level / fuel meter and fill fuel.
	3. Lights / horn very dim.	Weak/Discharged battery. Replace Battery.
	4. Electricals not working.	1. Battery completely dead. Replace battery. 2. Fuse Blown. Replace appropriate fuse. Note: If fuse blows again, contact Authorised Service Center.
	5. Engine Cranking but not starting.	Spark plug Cap/wire disconnected. Reconnect. Check if gear is engaged and the sidestand is down. If the ambient Temperature is low use Bistarter.
	6. MIL glowing continuously (Warning indicator lamp).	Contact Authorised Service Center.
Engine Starts BUT shuts off immediately	1. Engine shuts off as soon as throttle is closed.	Idling RPM set too low / setting disturbed. Contact Authorised Service Center for resetting the Idling RPM.
	2. Engine Starts but Shuts off immediately.	Check if the MIL Lamp is glowing; If yes, Contact Authorised Service Center.

TROUBLE SHOOTING

Symptom	Observations	Check for / Remedy
Engine Misfires & Erratic/ Stops	1. Motorcycle driven in Low gear / High gear in crowded places for long time.	Excessive Engine temperature. Switch OFF Engine and allow to cool down.
	2. Engine misfires and runs erratically.	Check if the MIL Lamp is glowing; If yes, Contact Authorised Service Center.
Poor Pickup	1. Engine RPM raises improporportionately to motorcycle speed.	Clutch is slipping. Check for sticky clutch/ clutch not having any free play.
	2. Rear Chain excessively loose causing slip on Sprocket.	Adjust the rear chain to correct tension.
	3. Poor pickup.	Check if the MIL Lamp is glowing; If yes, Contact Authorised Service Center.
ABS (Anti lock Braking system)	ABS lamp continuously ON.	Take the vehicle to service center for diagnosis.

WARRANTY TERMS & CONDITIONS

Royal Enfield warrants its this motorcycle to be free from manufacturing and materials defects, under normal use subject to the following conditions.

1. Warranty shall be in force until the expiry of a period of 24 months from the first date of sale to the first customer and to any subsequent owners for the balance of the remaining period, until expiry of 24 months from the date of first sale/registration of the motorcycle.
2. In order to effect Warranty, it is a prerequisite that the maintenance schedule prescribed by Royal Enfield in this Owner's manual and warranty repairs if any, has been carried out at the Authorized Distributor's service facility OR at their Authorized dealership's service facility.
3. Record of all the regular services and periodical maintenance that have been carried out, along with proof of service history will be required to be verified by the Authorized Distributor's service facility OR their Authorized dealership's service facility, prior to carrying out a warranty service.
4. Proof of Ownership, in the form of Sales Registration OR Proof of Purchase documentation of the motorcycle, clearly mentioning the Engine & VIN numbers, must be provided to the Distributor's service facility OR their Authorized dealership's service facility.
5. During the warranty period, Royal Enfield's obligation is limited to repair or replacing free of charge, such part or parts of the motorcycle, which in examination shall be deemed defective in the opinion of Royal Enfield and/or their distributors/authorized dealers. Such defective part/s, which has been replaced, shall become the property of Royal Enfield.
6. Cost of Consumables like fuel, Oils etc, Labour, Shipping charges of replacement parts for any warranty replacement are chargeable to the customer.
7. Warranty is not applicable for the following parts:
 - Ø Normal ageing of parts like rubber parts, tyres & tubes, hand grips, glass, plastic, soft items like seat rexene, cushion etc.
 - Ø Dullness of chrome plated parts, discolourisation of chromed exhaust pipe / silencer, buffed parts, painted surfaces etc.
 - Ø Normal wear & tear items such as control cables, brake pads / shoes, clutch plates, Drive Chain, Sprocket Kit, Steering ball races etc.
 - Ø Electrical items like bulbs, wiring harness, switches, battery, fuses, electric start motor etc.

WARRANTY TERMS & CONDITIONS

8. Warranty will become void under the following conditions:
 - Øl Damages due to lack of proper maintenance, periodic services not carried out as per Royal Enfield recommendation etc.
 - Øl Damages caused by any unauthorized repairs carried out in any part of the motorcycle.
 - Øl Failures occurred due to use of non recommended grade lubricants, fuel or improper level.
 - Øl Use of non genuine Royal Enfield parts.
 - Øl Damages caused due to unauthorized alterations to any part of the motorcycle.
 - Øl Use of accessories not supplied by Royal Enfield.
 - Øl Motorcycles fitted with side cars.
 - Øl Motorcycles used in rallies, off road, dirt track, races etc.
 - Øl Motorcycles involved in accidents, collisions etc.
 - Øl Damages that occur due to extreme operating conditions beyond the limitation or specifications as given by Royal Enfield, such as Maximum load carrying capacity, engine speed etc.
 - Øl Damages that occur due to long/improper storage, transportation of motorcycle etc.
9. Royal Enfield reserves the right to finally decide on all warranty claims.
10. Royal Enfield reserves the right to make changes in the motorcycle without any obligation to install these changes on previously sold motorcycles.
11. Royal Enfield authorized distributors and /or their dealers are independently owned and operated. They may hence deal with other aftermarket products for which Royal Enfield is not responsible for the performance, safety, quality, reliability and suitability of such products. Defects, if any in such parts OR that may arise in the motorcycle due to use of such parts is not liable to be covered by Royal Enfield and may render this warranty void.
12. There is no other express OR implied warranty in the motorcycle. Any implied warranty of merchantability or fitness is limited to the duration of this warranty.
13. To the fullest extent allowed by law, Royal Enfield and its authorized distributors and/or dealers shall not be liable for loss of use, inconvenience, loss of time, commercial losses or other incidental or consequential damages.

EVAPORATIVE EMISSION CONTROL SYSTEM WARRANTY

The following warranty applies to the evaporative emission control system.

Royal Enfield Motors warrants the first owner and each subsequent owner, that this motorcycle is designed and built so as to conform, at the time of sale, with applicable regulations specified by the evaporative emission control system related parts fitted to this motorcycle are free from defects in materials and workmanship which may cause this motorcycle not to meet applicable regulations period of 24 Months from the date of first use of the motorcycle.

The Warranty period shall begin either on the date the motorcycle is delivered to the first retail purchaser OR from the first date the motorcycle is used as a demonstrator OR as a display and/or trial motorcycle.

THE FOLLOWING ARE NOT COVERED BY EVAPORATIVE EMISSION CONTROL SYSTEM WARRANTY

1. Failures which may arise as a result of misuse, alterations, accidents OR non performance of routine maintenance, as specified in the Owner s Manual.
2. Replacing OR removing OR modifying any portion of the EVAPORATIVE EMISSION CONTROL SYSTEM (consisting of Fuel tank, fuel tank cap, Canister, purge valve, throttle body, vapor hoses, fuel hoses and hose connectors) with parts not certified to be genuine.

EVAPORATIVE EMISSION CONTROL SYSTEM W

3. Loss of time, inconvenience, loss of motorcycle use or any other consequential loss or damages.
4. Any motorcycle in which the Odometer has been tampered with, OR the Speedo cable has been disconnected for any reason OR is broken and not replaced immediately, due to which the exact distance covered cannot be determined.
5. Normal ageing of parts such as fuel hoses, vapor hoses, gaskets & rubber components.

RECOMMENDATIONS FOR REQUIRED MAINTENANCE:

IT IS RECOMMENDED THAT THE ROUTINE MAINTENANCE OF THE MOTORCYCLE BE CARRIED OUT AT SPECIFIED INTERVALS AND ANY MAINTENANCE TO THE EVAPORATIVE EMISSION CONTROL SYSTEMS SHOULD BE PERFORMED ONLY BY AN AUTHORISED ROYAL ENFIELD SERVICE DEALER AND USING ONLY GENUINE ROYAL ENFIELD SPARE PARTS.

ENVIRONMENT CARE

BE AN ENVIRONMENTALLY CONSCIOUS RIDER

You've ridden through some beautiful places on your Royal Enfield. Won't you like to keep them that way? Here are some tips to help you keep those places unspoilt so that others can enjoy them too:

Engine Oil

While your liquid waste like engine oil, gasoline, coolant and other cleaning solvents need to be regularly replaced, what happens to them? Make sure they are not dumped in the soil, down the sewers, drains, lakes or rivers around you. The simplest way to do it is to have them drained into a container which you can hand over to your local recycling agent or at your nearest Royal Enfield service centre. They will follow the guidelines laid down by the local authorities to get rid of it.

Battery

If your Royal Enfield's battery needs to be replaced, hand it over to an authorised recycling agent or Royal Enfield service centre. They will follow the guidelines laid down by the local authorities to get rid of it. This will ensure the dangerous substances from which the battery has been manufactured do not pollute the environment.

ENVIRONMENT CARE

Tyre(s)/Plastic/Electrical/Electronic parts/Oil Filter

If your Royal Enfield's tyre(s)/plastic/electrical/electronic part(s)/oil filter need to be replaced make sure you hand them over to an authorised recycling agent or a Royal Enfield service centre. They will follow the local authority's guidelines to get rid of them in an environmentally friendly manner.

Cleaning your Royal Enfield

Avoid aerosol sprays; instead, use a biodegradable detergent or dry wash to wash your Royal Enfield. Also, be cautious while discarding the cleaning solvents. Hand them over to an authorised recycling agent or a Royal Enfield service centre. They will follow the local authority's guidelines to get rid of them in an environmentally friendly manner.

This note does not constitute legal advice; please contact your local authorities or your nearest Royal Enfield Service Centre for further guidance.

SERVICE MAINTENANCE RECORD

S.No.	Date	Job Card No.	KMS Miles	Brief details of work / service	Royal Enfield Authorized Dealer
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

SERVICE MAINTENANCE RECORD

S.No.	Date	Job Card No.	KMS Miles	Brief details of work / service	Royal Enfield Authorized Dealer
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					

SERVICE MAINTENANCE RECORD

S.No.	Date	Job Card No.	KMS Miles	Brief details of work / service	Royal Enfield Authorized Dealer
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					

SERVICE MAINTENANCE RECORD

S.No.	Date	Job Card No.	KMS Miles	Brief details of work / service	Royal Enfield Authorized Dealer
25.					
26.					
27.					
28.					
29.					
30.					
31.					
32.					

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