ROYAL ENFIELD

ROYALENFIELD.COM

THUNDERBIRD 500

ROYAL ENFIELD OWNER'S MANUAL

Notice

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

Service Headquarters

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Website : www.royalenfield.com

Applicable for STONE BLACK Colour

DISCLAIMER

Care needs to be taken as instructed below in order to ensure a longer life for the paint.

1. Do not polish your motorcycle as it increases gloss.
2. Wash only with plain water.
3. Scratches or marks cannot be removed.

No warranty for STONE BLACK colour.

Part No.594132/B /Qty. 1000 / Apr'2014

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Contents

Contents

Personal & Vehicle Information

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

Vehicle Installation Form (VIF) No.	

Free Service Record

It is our endeavour to provide excellent service to your THUNDERBIRD 500 at all times. Towards this we provide 4 free services at specific Intervals.

Please avail these services at the specified time, in any of the Royal Enfield Dealerships / Authorised service points nearest to you and as a token of satisfactory services, Kindly return the free service coupon duly filled in and signed, to the service outlet.

Availing the free services in the specified time is a prerequisite for warranty consideration. The costs of fuel, oil, grease etc. used for all services are chargeable to the customer.

	1st Service						2nd Service						3rd Service						4th Service					
Date of Service																								
Kms Covered																								
Servicing ASP / Dealer's Name Address																								

NOTE: Please ensure that the free service details are recorded in this sheet immediately after the service is carried out.

Technical Specification

Engine

Engine.	4 Stroke, air cooled, single cylinder, OHV, SI Engine
Capacity	499 cc (Displacement)
Bore	84 mm
Stroke	90 mm
Compression ratio	8.5 : 1
Max. Power @ RPM	27.2 BHP @ 5250 rpm
Max. Torque @ RPM	41.3 Nm @ 4000 rpm
Air Filter Element	Corrugated Paper Element
Engine Oil Capacity	2.75 Litres.
Lubrication	Forced Lubrication, Wet Sump
Engine Oil Grade	ROYAL ENFIELD 15W50 API SL, JASO MA
Cooling system	Natural Air Flow
Fuel Supply	Electronic Fuel Injection Programmed (PGM-EFI)

Technical Specification

IGNITION SYSTEM

Ignition system	Electronic Ignition (ECU / Variable)
Spark plug Electrode gap	0.70 to 0.80 mm
Spark plug	WQR8DP M14 (Bosch Super), UR6DC M10 (Bosch Super)

TRANSMISSION

Clutch	Wet Multiplate (7 Plates)
Primary drive	Duplex Chain
Primary Drive Ratio	2.15 : 1
Gear box	Constant Mesh 5 Speed
Gear shift pattern	1 - N - 2 - 3 - 4 - 5
Gear Ratios	1st-3.06:1 2nd-2.01:1 3rd-1.52:1 4th-1.21:1 5th-1:1
Final Drive	F.D. Sprocket -18 Teeth
Final Ratio	2.11 : 1
Drive Chain links	102 links

Technical Specification

ELECTRICALS

Generation	Alternator
System	12V DC
Battery	12V – 14AH MF
Head lamp	Projection type head lamp, H7 bulb 55 & 55 W with LED light guide ring.
Brake / Tail lamp	LED lamp with position light guides
Turn signal / Hazard warning	12V - 10 W, 4 Nos.
Instrument Cluster	Digital cluster with LCD panel
High beam Indicator	LED, 12V - 1 No.
Turn Signal Indicator	LED, 12V - 2 Nos.
Hazard Indicator	LED, 12V - 1 No.
Position Indicator	LED, 12V - 1 No.
Malfunction Indicator Lamp (MIL)	LED, 12V - 1 No.
Neutral Indicator	12V - 1.4 W, 1 No.
Side Stand Indicator	12V - 1.4 W, 1 No.
Horn (Dual)	12V, 2.5 Amp (Max.) X 2 nos.
Starter Motor	12V, 900 Watts

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

Technical Specification

CHASSIS

Frame	Single Down Tube, Using engine as stressed member.
Tyre size	**Front**: 90 / 90- 19" - 52 P **Rear:** 120/80 - 18" -62 P
Tyre pressure	**Front**- Solo: 1.41 Kg/cm2 (20 PSI) **Pillion:** 1.55 Kg/cm2 (22 PSI)
	Rear- Solo: 2.11 Kg/cm2 (30 PSI) **Pillion:** 2.25 Kg/cm2 (32 PSI)
Fuel tank capacity	19 Litres ***
Low fuel warning	Last bar blink system 5.5 ± 0.50 ltrs approx.
Dead stock of petrol (unusable fuel)	0.5 litre approx.
Suspension	**Front:** Inline - Telescopic Fork (Dia 41 mm), Hyd. Damping Stroke 130mm
	Rear: Rigid Oval Section Swing arm with gas filled shock absorbers Stroke 80 mm (5 Steps Adjustable)
Front fork oil capacity	430 ± 3 ml per leg
Front fork oil	Gabriel front fork (2W35 Grade) oil
Brakes	**Front Brake** : 280mm Ventilated Disc, Double piston caliper
	Rear Brake : 240mm Ventilated Disc , Single piston caliper

***Fuel tank is not a measuring instrument.
The capacity of tank may vary slightly from specified value.

Technical Specification

Brake oil capacity	**Front:** 60ml **Rear:** 100ml
Brake oil grade	DOT 3 or DOT 4

DIMENSIONS

Length	2060 mm
Width	790 mm
Height	1205 mm
Wheel base	1350 mm
Saddle height	775 mm
Ground clearance	140 mm

WEIGHTS

Kerb Weight (with 90% Fuel)	192 Kg
Max pay load	180 Kg

NOTE:

1. Above Values / Dimensions are given for your guidelines / reference only.
2. In view of continuous improvements being done on our products, the specifications are subject to change without notice.

This motorcycle meets emission Norms – Bharat Stage III

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 it disregarded may result in damage to the vehicle.

NOTE :

Indicates important and useful messages for clear understanding.

All India Road Signs

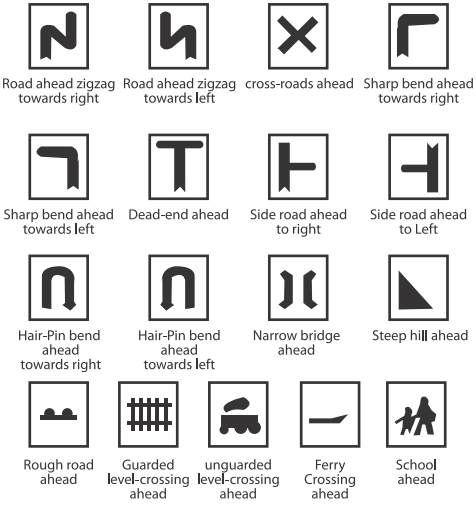
MANDATORY SIGNS

One-way Street | No-parking Zone | Use of sound signals prohibited | Speed Limit | Overtaking Prohibited | Drive dead slow main road ahead

INFORMATION SIGNS

End of speed limit | Parking place | No-Parking Zone

CAUTIONARY SIGNS



Road ahead zigzag towards right | Road ahead zigzag towards left | cross-roads ahead | Sharp bend ahead towards right

Sharp bend ahead towards left | Dead-end ahead | Side road ahead to right | Side road ahead to Left

Hair-Pin bend ahead towards right | Hair-Pin bend ahead towards left | Narrow bridge ahead | Steep hill ahead

Rough road ahead | Guarded level-crossing ahead | unguarded level-crossing ahead | Ferry Crossing ahead | School ahead

Safe Riding Tips / Guidelines

- Before operating your new motorcycle, it is your responsibility to carefully read and follow the operating and maintenance instructions detailed in this manual for your own safety, your motorcycle and that of others.
- 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, handle bar controls, tyre pressures, fuel and oil levels.
- Use only genuine Royal Enfield spare parts and approved accessories. Use of other manufacturer's performance parts may affect the performance of your motorcycle and render the motorcycle void of warranty. See your Royal Enfield dealer for details.
- Whenever refuelling your motorcycle, please exercise utmost caution and carefully observe the following rules.
- DO NOT 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.
- DO NOT fill the tank to its brim. Please fill fuel only till the bottom of the filler neck insert, so as to leave air space in the fuel tank to allow for fuel expansion.

Warning

Royal Enfield cautions you against the use of certain nonstandard parts such as aftermarket and custom made extended 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.

Safe Riding Tips / Guidelines

- A new motorcycle must be operated according to the special running-in-procedure. (Ref Page No. 40)
- Operate motorcycle only at moderate speeds and out of traffic until you have become thoroughly familiar with its operation and handling characteristics under all conditions.
- 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.

Pay strict attention to road surfaces and wind conditions. Any two wheeled vehicle 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.

- 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 vehicle fails to see or recognize a motorcycle and turns into the oncoming motorcyclist.

Safe Riding Tips / Guidelines

- Wear an ISI approved helmet, clothing and foot gear suited for riding a motorcycle. Bright OR light colours are best for greater visibility in traffic, specially at night. Avoid loose, flowing garments and scarves.
- When carrying a pillion rider, it is your responsibility to instruct them on proper riding procedures.
- 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.

Warning

Regularly inspect shock absorbers and front forks and look for leaks. Replace worn out parts. Worn out parts can adversely affect stability and handling.

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.

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.

Safe Riding Tips / Guidelines

Warning

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

Warning

Motorcycle 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.

Warning

Consult your Royal Enfield Dealer regarding any questions or problems that occur in the operation of your motorcycle. Failure to do so may aggravate an initial problem, cause costly repairs & jeopardize your personal safety.

Warning

DO NOT tow a disabled motorcycle. The steering and handling of the disabled motorcycle will be impaired due to the force 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.

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.

Safe & Happy Riding

RIDING DRESS

- Please wear proper riding apparel.
- A pair of riding boots or shoes.
- Soft leather gloves.
- Goggles or spectacles to safe guard eyes.
- ISI certified helmet. Affix light reflecting strips of radium stickers at the front and rear.

NOTE

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

CAUTION

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

SITTING POSTURE

Correct sitting posture is a pre-requisite for stable and safe riding.

- Sit straight with your shoulders completely relaxed.
- Keep your elbows close to your body.
- Keep your toes in straight ahead direction.
- Slightly grip the petrol tank with both knees.
- Hold the handle bar grips, close to its inner end.
- Look extensively ahead, including rear view mirrors, without turning the head.

BRAKING

- Apply front and rear brakes gently and simultaneously for maximum braking efficiency.

Warning

Applying any one of the brakes suddenly may cause the vehicle to skid. The hydraulic disc brakes fitted on your motorcycle require very less effort. High effort or sudden application may lock the wheel. Please use utmost caution while applying the brakes.

- While riding on wet or bad road conditions use brakes cautiously.
- Avoid excessive banking, otherwise footrest may touch the ground and cause instability.

Rules of the Road

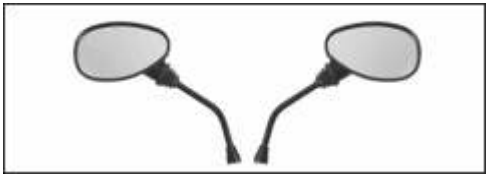
- Be sure your number plate is installed in the position specified by law and is clearly visible at all times.
- Ride at a safe speed that is consistent with the type of road surface you are on. Pay strict attention to whether the surface is:
    - Dry
    - Oily
    - Icy
    - Wet
- Watch for loose debris, such as leaves, slippery substances or loose gravel that can hamper the stability of your vehicle.
- 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.
- Keep to the correct side of the road center line when meeting oncoming vehicle.
- Always sound your horn, actuate your turn signals and exercise caution when passing other vehicles going in the same direction. Never try to pass another vehicle going in the same direction at street intersections, on curves, or when going up/or down a hill.
- At street intersection give the right-of-way to the vehicle on your left or right. DO NOT presume you have the right-of-way.
- Always signal when preparing to stop, turn or pass.
- While turning either right or left, watch for pedestrians, animals, as well as vehicles.
- All traffic signs, including manual controls at intersections, should be obeyed promptly. SLOW DOWN at traffic signs near schools and CAUTION signs at railroad crossings.
- 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.

Rules of the Road

- 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.

- DO NOT leave the curb or parking area without signalling. Be sure your way is clear to enter moving traffic. A moving line of traffic always has the right-of -way.
- Park your motorcycle on a firm and flat surface to prevent it from falling over.
- Protect your motorcycle against theft. After parking Your motorcycle, lock the steering head.

SIDE VIEW MIRRORS



Your motorcycle is equipped with convex mirrors and had a curved surface. This type of mirror is designed to give a much wider view to the rear than a flat mirror, however, cars and other objects seen in this type of mirror will look smaller and farther away than when seen in a flat mirror.

Use care when judging the size or distance of objects seen in these mirrors.

NOTE:

To help you establish the relative distance of vehicles behind your motorcycle, adjust each mirror in such a way, that a small portion of your shoulder is visible and a large portion behind your motorcycle is seen clearly.

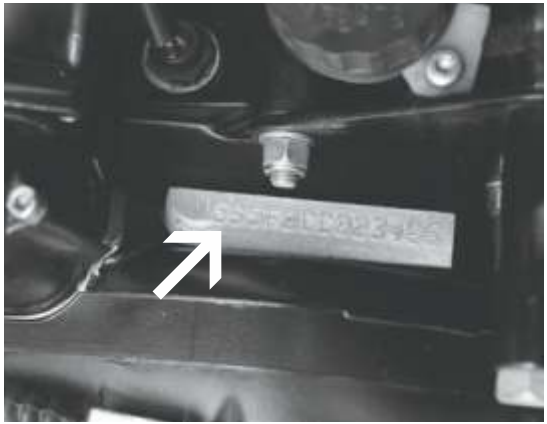
Vehicle Identification

Chassis Number

Punched on the steering head tube

Engine Number

Punched on the crankcase LH (Top Side)



Key Parts Location

TOP VIEW

	Turn Signal Indicator LH
	Turn Signal Indicator RH
	High Beam Indicator
N	Neutral Indicator
	Hazard Warning Indicator
	Malfunction Indicator Lamp
	Parking Lamp Indicator
	Side Stand Indicator

1. Speedometer	4. Select Button
2. RPM Meter	5. Set Button
3. Alpha - Numeric Display Unit	6. Hazard Button

Key Parts Location

RIGHT SIDE VIEW

1. RH Trafficator Front
2. Brake Pedal
3. Starter Motor
4. Utility Box (Tool kit)
5. Air Filter Box
6. RH Trafficator Rear

Key Parts Location

LEFT SIDE VIEW

1. LH Trafficator Front
2. Horn
3. Gear Change Pedal
4. Spark Plug
5. Battery Cover
6. Side Stand
7. Centre Stand
8. LH Trafficator Rear
9. Utility Box (Fuse Carrier)

Operation of Control

ON

Insert ignition key and turn clockwise direction to "ON". Once you turn on the ignition key all the indicating lights in instrument cluster starts glowing on for few seconds and engine is ready to start.

The key cannot be removed in "ON" condition.

OFF

Turn the ignition key in anticlockwise direction to "OFF". Once you turn off, all the electrical systems goes off.

Now the key can be removed.

Steering lock

Turn the handle bar to extreme left or right position.

Push the key inside in "OFF" position, further turn anticlockwise direction to lock the steering system.

The key can be removed.

Steering unlock

Push the key in steering lock Position, further turn clockwise direction to unlock the steering.

The key can be removed.

Operation of Control

Caution
Protect your motorcycle against theft. After parking your Motorcycle and lock the steering, then remove the key from combination switch.

Do not lubricate barrel locks with petroleum based lubricants or graphite. Inoperative locks may result in damage to your vehicle.

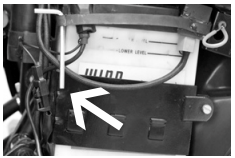
Fuel Tank
Turn key clockwise to open. Press cap to lock with key in position.

Note
Key can be removed only on locked position. Use high quality unleaded high octane petrol (>87 octane and above) for enhanced performance.

Side Panel / Battery Cover.
Turn key clockwise to open side panel. Key cannot be removed.

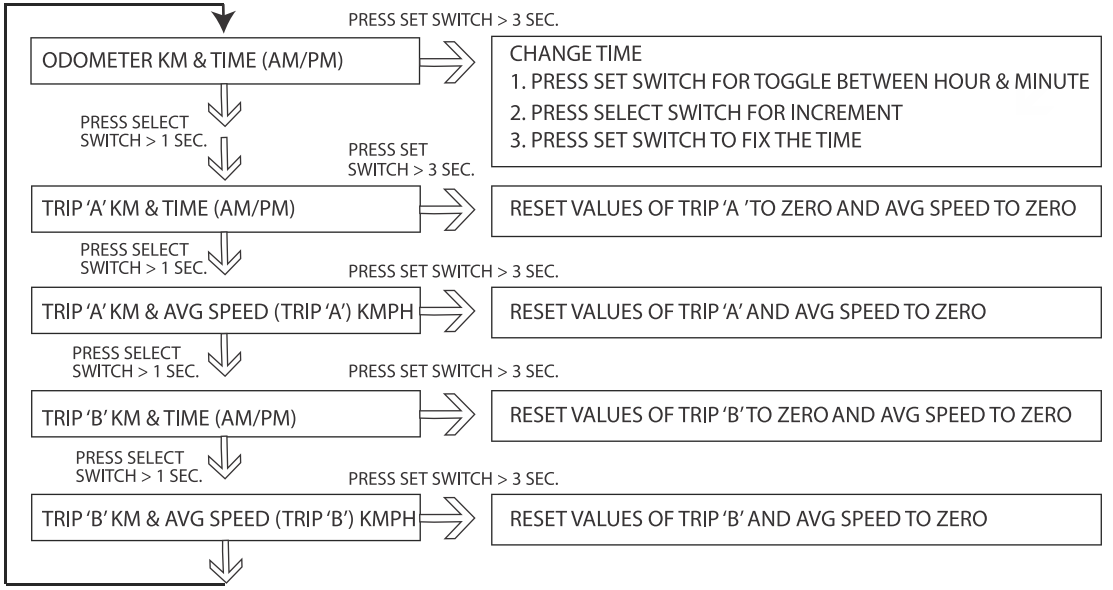
Side Decor
For removing LH or RH side decor by removing the screw using 4 mm allen key.

The Allen key is located in the battery carrier rubber strap as shown in fig.



Operation of Control

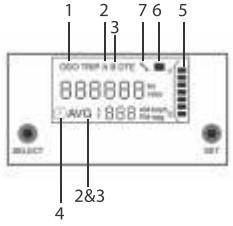
Instrument Cluster Display Pattern



Operation of Control

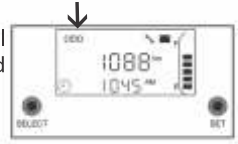
Alpha-Numeric display unit

1. Odometer
2. Trip A /AVG speed of Trip A
3. Trip B /AVG speed of Trip B
4. Clock
5. Fuel level indicator
6. Battery low voltage indicator
7. Service Reminder



Odometer Mode

Odometer mode is an initial mode. It displays odometer and time.



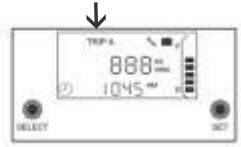
Note

Once you turn “ON” the ignition key, whatever the last selection mode will display. If the current display mode in "TRIP A", you just off the ignition key.

Once you turn the ignition key the display mode remaining same.

Trip Meter Mode

A brief push (less than one second) on the "SELECT" button switches the display from odometer to Trip meter (TRIP A).



Trip Meter AVG Speed Mode

Again press the "SELECT" button switches the display from "TRIP A" to "TRIP A AVG"
Again press the "SELECT" button switches the display from "TRIP A AVG" to "TRIP B"
Again press the "SELECT" button switches the display from "TRIP B" to "TRIP B AVG"

Operation of Control

Note

After running of One Kilometer only, AVG TRIP A/B Speed will be displayed.

Reset Trip Meter

1. Change TRIP A/B as a current mode.
2. Press the "SET" button (more than 3 Seconds).
3. Automatically the display will be zero.

Clock

The clock indicates the Hours/ Minutes and AM/PM.

Reset Clock

1. Change Odometer/as a current mode.
2. Press the "SET" button (more then 3 Seconds).
3. The Hours will be blinking, and press the "SELECT" button to change the Hours.
4. Again press the "SET" button (more than 3 seconds).
5. The Minutes will be blinking, then press the "SELECT" button to change the Minutes.

Note

Once you press the "SELECT" button the Hours/Minutes will increase in ascending order only, it will not decrease. The Hour/Minutes blinks less than 1 minute, within the time limit you have to reset the clock otherwise it will come out from the reset mode.

Fuel level Indicator

The fuel level indicator indicates the level of fuel in the fuel tank.

The display bars of the fuel meter disappears towards the Empty (E) if the fuel level decreases.
When last bar will start blinks, (Fuel Capicity is less than 5.5 Ltrs) refuel as soon as possible.

Operation of Control

Note

If the last bar of the fuel meter is blinking continuously after fueling, visit the Royal Enfield authorised dealer to check the electrical system.

Battery low voltage Indicator

Once switch "ON" the ignition key, after 7 seconds only battery indicator will indicates. If the battery voltage is less than 12 volts, it will start blinking.

In running condition the battery voltage is below 12 Volts in 3 seconds continuously, the battery indicator will start blinking.

Service Reminder

The service reminder indicates that if your bike is due for service.

The service reminder symbol will start blinking Kilometers ranges as shown below:

Service Due	Kilometers
1	450
2	2900
3	5900
4	8900

Warning

Do not change the setting while riding, it may cause loss of control leading to an accident.

Note

During this Service Reminder Blink you are advice to visit Dealer Workshop / ASP for availing respective Free / Paid services.

Operation of Control

HEAD LAMP SWITCH

OFF

PILOT LIGHT ON

ON

HEAD LAMP DAY FLASH

PRESS FOR HEAD LIGHT FLASH

DIP SWITCH

LOW BEAM

HIGH BEAM

Operation of Control

ENGINE START SWITCH

PRESS

ENGINE STOP SWITCH

ENGINE 'ON'

ENGINE 'OFF"

TURN SIGNAL SWITCH

OFF (PUSH TO OFF)

LEFT

RIGHT

Operation of Control

HORN

MANUAL BI STARTER (CHOKE)

HAZARD SIGNAL BUTTON

SELECT BUTTON

SET BUTTON

Operation of Control

PILLION SEAT REMOVING & REFITTING

SEAT REMOVING

1. Remove the battery cover (side panel LH).

2. There are 2 cable hooks, Black & Yellow on right side of the battery (below the hook, Index mark "R" - Rider & "P" – Pillion).

3. Pull out the Yellow hook to remove Pillion seat.

4. Pull the seat backwards and remove.

SEAT REFITTING

1. Insert the pillion seat bottom lugs (fig. A) into the slots provided in the chassis top cover plate as shown (fig. B)

2. Align (fig. C) & press the Pillion seat gently to lock in seat catcher lock (fig. D).

A

B

C

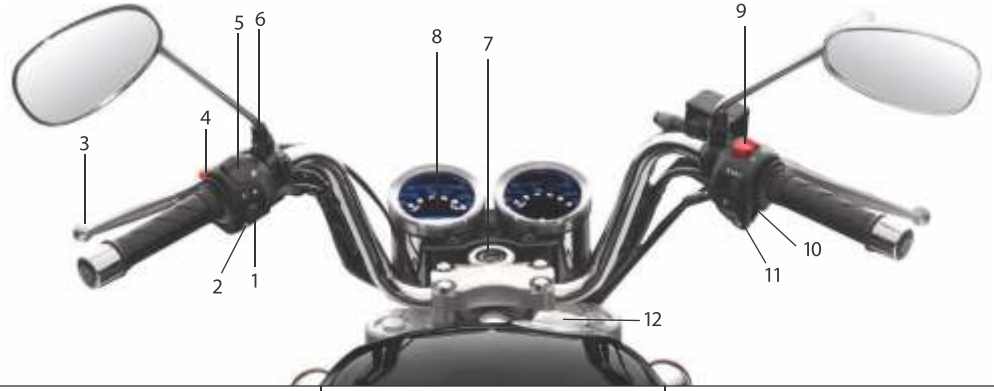
D

Warning

Check the pillion seat for proper fitment. Refix the side panel properly and lock it.

Key Parts Location

TOP VIEW



1. Turn Signal Switch	6. Manual Bi-Starter Choke	11. E-Start Switch
2. Horn Button	7. Ignition Switch	12. Fuel Tank Cap
3. Clutch Lever	8. Speedometer	
4. Day Flash Switch	9. Engine Kill Switch	
5. Head Lamp Dip Switch	10. Pilot Head Light Switch	

Operation of Control

RIDER SEAT REMOVING & REFITTING

SEAT REMOVING

1. Remove the battery cover (side panel LH).

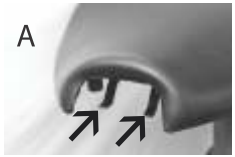
2. There are 2 cable hooks, Black & Yellow on right side of the battery (below the hook, Index mark "R" - Rider & "P" – Pillion).

3. Pull out the Black hook to remove Rider seat.

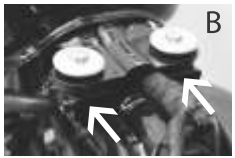
4. Pull the seat backwards and remove.

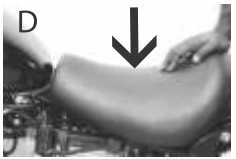
SEAT REFITTING

1. Insert the rider seat bottom lugs (fig. A) into the slots provided in the chassis top cover plate as shown (fig. B)



2. Align (fig. C) & press the rider seat gently to lock in seat catcher lock (fig. D).





Warning

Check the rider seat for proper fitment.

Notes

Pre Operational Checks

A careful check of the following must be carried out every time before riding and specially after long periods of storage to determine if additional maintenance is necessary.

1. Tyres for correct pressure, abrasions or cuts.
2. Rear chain for proper tension.
3. Brakes, steering and throttle for responsiveness.
4. Cable for fraying or crimping and free operation.
5. Engine oil level.
6. Wheel spoke for proper tightness, no breakage.
7. Headlamp, tail lamp, brakes lamp and indicator lamps for proper operation.

Warning

For your personal welfare and safety, all the points mentioned above should be performed periodically. Failure to do so may affect safe operation and damage your motorcycle and could result in an accident causing serious injury.

Running In

Proper running-In is very important for obtaining maximum life and performance of a new motorcycle. The following guidelines explain proper running-in procedures.

Since the engine is brand new, it should not be loaded excessively for the first 2,000 kms. During the first few hundred kms, the various parts in the engine wear and polish themselves to the correct operating clearances. Driving with prolonged full throttle operation, or any high speed conditions might result in excessive heating of the engine and cause abnormal wear of the moving parts and hence must be avoided.

1. 0-500Kms

The recommended speeds for the first 500 Kms is below 50 Kmph. During this period avoid operating the motorcycle with full throttle opening. Stop the motorcycle for about 5 to 10 minutes to let it cool down, after every hour of running. Vary the speed of the motorcycle regularly during running but avoid using the motorcycle above 1/2 throttle opening position.

2. 501-2000Kms.

The recommended speed is below 80 – 90 kmph. Avoid driving the motorcycle with full throttle opening. Vary the speed of the motorcycle regularly but avoid using the motorcycle above 3/4 throttle opening position.

3. 2001 kms and above

Avoid prolonged full-throttle operation. Vary speed occasionally.

CAUTION`

After covering the first 500 kms. Please replace the engine oil and oil filter paper element.

Royal Enfield engines are air-cooled and consequently require forced air cooling over the cylinder and head to maintain proper operating temperature. Extended periods of idling may over heat the engine, resulting in serious engine damage.

DO NOT run the engine at extremely high RPM with clutch disengaged or transmission in neutral as it can cause serious engine damage.

An engine running long distances at high speed must be given close attention to avoid overheating and possible engine damage.

Electronic Fuel Injection & MIL

ELECTRONIC FUEL INJECTION (EFI)

An electronic control unit (ECU) monitors engine performance and provides exact requirement of Air / Fuel mixture to the engine, through the fuel injector by taking inputs from various sensors provided in the motorcycle.

THE ADVANTAGES OF EFI ARE

- Faster response of the engine to suit
- Better power output.
- Lower emission.
- Better reliability.
- Excellent cold Startability.
- Engine Diagnostic capabilities.
- Maintenance free.

MALFUNCTIONING INDICATOR LAMP (MIL)

A Malfunctioning Indicator Lamp (MIL) is provided in the RPM meter located on the right side of the Cluster unit.

There are 8 indications in this unit.

1. EFI Mal-function Indicator

When both the Ignition & Engine kill switch is "0N", the MIL will glow for few seconds and will go "OFF". This indicates that all the functions of Electronic Control Unit (ECU) and other sensors are working perfectly and the motorcycle can be used.

In case of any malfunctioning of the ECU or other sensors etc., the MIL will glow continuously. In the event of any such phenomenon, it is recommended to take the vehicle to a nearest Royal Enfield authorised service point for inspection and further necessary action.

Rollover Sensor

ROLLOVER SENSOR

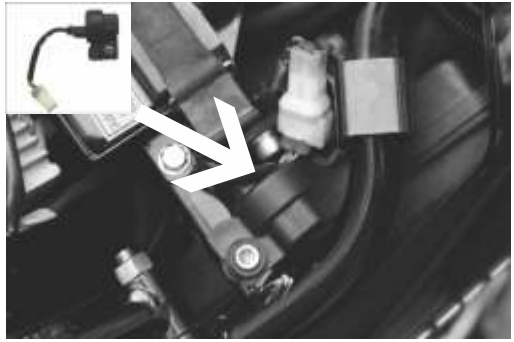
Your motorcycle is fitted with a unique "Roll Over Sensor" under rider seat. This is a safety feature.

In the event of an accident OR if the motorcycle falls over on any side with the engine running condition.

The "Roll Over Sensor" will switch off Ignition and cut off fuel supply to prevent the motorcycle from moving suddenly, if it is in gear.

To re-activate the system after the motorcycle has been made upright, please switch off both the Ignition & Engine kill switch, wait for a few seconds and switch "ON" again.

This will help to RESET the "Roll Over Sensor" and the engine can be started/ run.



Starting

Warning

Before starting engine, always shift gears into neutral.

CAUTION

Do not force the gear lever while attempting to shift to neutral. Move the motorcycle back & forth and simultaneously press gear lever to come to neutral. Ensure neutral Indicator light glow in the Instrument Cluster Unit

NOTE

- If the engine does not start on the first attempt in cold climate, release the starter button, wait for 30 seconds before pressing the starter button again.
- Press starter button and release starter switch once the engine starts.
- A clutch switch is provided in the system for the safety of the rider. This is to prevent the vehicle from starting when the vehicle is in gear. To start the engine when it is in gear, pull clutch lever, press starter button and release as soon as the engine starts.
- Turn ignition switch "0N"

- Ensure the side and main stands are in released position.
- Ensure that gears are in neutral and neutral lamp is glowing.

Starting

- Ensure Engine stop switch is in 'RUN' position.

- Press Clutch Lever.

- Press Starter Button and release as soon as engine starts.

CAUTION

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

Starting

- Manual bi (choke) Starter.

NOTE

It may be necessary to operate and hold the manual bi starter, when starting the engine for the first time in cold mornings, temperature is below 10°C or at high altitudes, to prevent the stalling and to keep the idling RPM steady.

As soon as the engine attains the operating temperature, the RPM will raise, at which time the manual Bi Starter should be released.

- Warm up engine for 2 minutes - till idling is consistent.
- Prior to starting, check the fuel level indicator.

- If the fuel level indicator's last bar blink continuously, The fuel level in tank is below 5.5 Litres. (Approx.)

CAUTION

Please ensure the motorcycle is not used with the Fuel Level Indicator bar blinking continuously. It may not only result in the motorcycle running out of fuel. But will also cause serious damage to the fuel pump. Please ensure fuel is filled up as soon as the Fuel Level last bar blinks.

Gear Shifting

GEAR SHIFT PATTERN 1 - N - 2 - 3 - 4 - 5

- Warm up engine for 2 minutes - till idling is consistent / stable .
- Press clutch lever towards the hand grip.
- Press gear pedal with toe to engage 1st gear.
- Gently open throttle and release clutch simultaneously. If clutch is released suddenly, the engine may stall and cause a jerky start.

- Press the gear pedal with heel to engage 2nd and higher gear.

- Follow the same procedure for 3rd, 4th and 5th gear.

CAUTION

The clutch must be fully disengaged before attempting a gear shift. Failure to fully disengage the clutch may cause a jerky start or stalling the engine besides causing damage to transmission parts.

NOTE

Always start motorcycle with gear in neutral position.

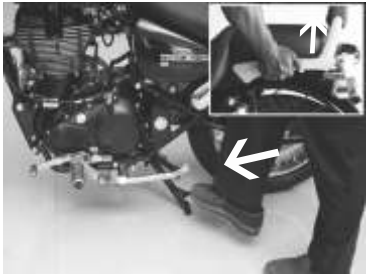
Always move the motorcycle in first gear position only.

When engine speed decreases or while climbing a gradient or running at a reduced speed, shift to the appropriate lower gear to prevent the engine from stalling or straining to pull.

Parking

PARKING VEHICLE ON CENTER STAND

- Select a firm, flat surface.
- Hold handle bar straight.
- Lower center stand, and ensure that both the legs of the stand are resting evenly on firm ground.
- Apply pressure on the fulcrum lever on the center stand and pull vehicle backwards, simultaneously lift up back rest gently.



PARKING VEHICLE ON SIDE STAND

- Select a firm, flat surface.
- Lower Side Stand and gently tilt motorcycle to the left till it rests firmly.

Warning

Always park the motor cycle on a firm and flat surface. Parking in a soft ground may cause stand to sink and the motorcycle to fall, causing injury to you or to others and damage to the motorcycle parts.

Tools & First Aid Kit

S.No.	Description	Qty.
1.	Tool bag	1
2.	Screwdriver	1
3.	Tommy bar	1
4.	Box spanner 21x24mm	1
5.	Tool-Spark plug	1
6.	Double end spanner 1/4x5/16inch	1
7.	Double end spanner 10x12mm	1
8.	Allen Key 4mm	1

S.No.	Description	Qty.
1.	Antiseptic cream 5 gms	1
2.	Gauze bandage 5cm x 2cm	1
3.	Elastic gauze bandage 8cm x 1mtr.	1
4.	Wash proof plaster 1.9cm x 7.2cm	2
5.	Sterilized Gauze Swab 5cm x 5cm	2
6.	Sterilized elastic plaster 7cm x 6cm	1
7.	First aid kit pouch	1

Note

This Tool kit is kept in Utility box, Refer page No.25

Recommended Lubricants

Engine Oil Capacity	Royal Enfield Engine Oil 15W50 API SL JASO MA 2.75 Litres (With oil Filter) 2.5 Litres (During Oil & Filter Replacement)
Front Fork Oil Capacity	Gabriel Fork Oil (2W35 Grade Royal Enfield) 430 ± 3 ml per leg
Brake Fluid Capacity	DOT 3 OR DOT 4 Front disc brake - 60ml. Rear disc brake - 100ml.

ISO 14001 - EMS Operation Control Process
1. All customers are advised timely replacement of Engine Oil, Fork Oil & Brake Oil at the dealership/ASP. In case done privately, it is advised to reach old/used Oil to our authorised vendor through RE Dealer/ASP. 2. Similary we advise for disposal of old/used Battery, Tube & Tyres as mentioned in above point No.1.

Warning

Do Not switch oil brands indiscriminately because some oil interact chemically when mixed. Use of inferior oils or nondetergent oils can damage the engine.

Don't mix DOT 3 & DOT 4 brake fluid together.

Periodical Maintenance

The maintenance schedule detailed here will help you to maintain your Royal Enfield motorcycle meticulously and to get a long trouble free service. The schedule provided herein is based upon average riding conditions and indicates the mileage at which regular inspections, adjustments, replacements and lubrications must 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, severe climatic cold and hot conditions, bad roads, stagnant water etc., Contact a nearest Royal Enfield Dealer for expert advice and to carry out the periodical maintenance.

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 causing the motorcycle to malfunction and stall abruptly resulting in an accident and cause serious injury.

Periodical Maintenance

S. No.	DESCRIPTION	FREE SERVICES Whichever Is earlier				PAID SERVICE						
	Kms (X 1000)	0.5	3	6	9	12	15	18	21	24	27	30
	Months	1.5	3	6	9							
1	Engine oil	R	I	R	I	R	I	R	I	R	I	R
		Check level every 1000 Kms or earlier as required										
2	Engine oil filter paper element	R	C	R	C	R	C	R	C	R	C	R
3	Engine Suction filter & secondary drain magnetic plug	C		C		C		C		C		C
4	Spark plugs (2 nos.)	C,A	C,A	C,A	C,A	C,A	R	C,A	C,A	C,A	C,A	R
5	HT leads for crack	I	I	I	I	I	I	I	I	I	I	I
6	Fuel hose & clip/ Injector'O'Ring/Seal Ring	I	I	I	I	R	I	I	I	R	I	I
7	Throttle body - Cleaning Spray *			C		C		C		C		C
8	Fuel Pump (under tank)	Check for screw tightness in all services										
9	Accelerator & Throttle pully cable free play	A	A	A	A	A	A	A	A	A	A	A
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

Periodical Maintenance

S. No.	DESCRIPTION	FREE SERVICES Whichever Is earlier				PAID SERVICE						
	Kms (X 1000)	0.5	3	6	9	12	15	18	21	24	27	30
	Months	1.5	3	6	9							
12	Air filter element	C	C	C	C	R	C	C	C	R	C	C
13	Inlet/Exhaust Valve seating						I					I
14	Cylinder head (Combustion chamber)											D
15	Clutch lever free play	Adjust every 1000 Kms or earlier as required										
16	PAV pipes & hose clip	I	I	I	I	I	I	I	I	I	I	I
17	Battery terminals (apply petroleum jelly)	C	C	C	C	C	C	C	C	C	C	C
18	Battery Electrolyte level	I	I	I	I	I	I	I	I	I	I	I
19	Earth wire eyelet (below fuel pump relay / ECU Mtg.)						I					I
20	Rear Wheel Drive Chain	Adjust for every 1000 Kms/Clean, Lubricate & adjust every 3000 kms or earlier as required										
21	Rear Brake Pedal Free Play Adjustment.	I	I	I	I&A	I	I	I	I&A	I	I	I

Periodical Maintenance

S. No.	DESCRIPTION	FREE SERVICES Whichever Is earlier				PAID SERVICE						
	Kms (X 1000)	0.5	3	6	9	12	15	18	21	24	27	30
	Months	1.5	3	6	9							
22	Front Fork oil / oil leak	I	I	I	R	I	I	R	I	I	R	I
23	Steering ball races / play adjustment					L&A				L&A		
24	Spokes tightness & Wheel rim run out	I		I		I		I		I		I
25	Swing Arm pivot bush & spacer			L		L		L		R		L
26	Tyre wear (Front & Rear)	I	I	I	I	I	I	I	I	I	I	I
27	Hand levers & Kick starter level pivot	Lubricate every 1000 Kms or earlier as required										
28	Handle Bar Damper Rubbers								C&R			
29	Front & Rear Brake hose and banjo bolt	I	I	I	I	I	I	I	I	I	I	I
30	Brake fluid Front / Rear	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 manintenance after 30,000 Kms, please repeat the same frequency level specified above, in consultation with a Royal Enfield Dealer / Authorised Service Point

*Carbo cleaner / Carblick or Fuel line Cleaner Spray. (Make - Wurth or ITW Chemin)

Minor Maintenance Tips

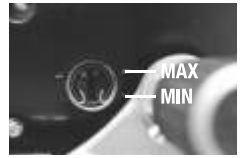
The following minor maintenance can be carried out easily with simple tools. However, in case, if it is felt that the adjustments are best done by an expert, we recommend that the motorcycle be taken to a nearest Royal Enfield Dealer / Authorised Service Point.

CONTROL CABLES, HANDLE BAR LEVER, PIVOTS, CENTRE/SIDE STAND PIVOTS



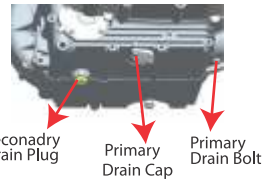
- Lubricate after using the motorcycle in rain, after water wash or if used in dusty conditions.
- Wipe the area free of dirt / grease.
- Apply a few drops of oil on the pivots.

OIL LEVEL INSPECTION



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

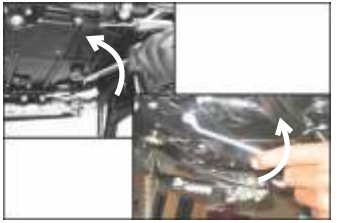
ENGINE - OIL CHANGE



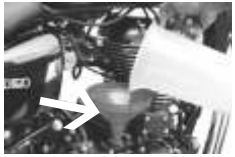
(Refer Periodical Maintenance Chart for frequency)

Minor Maintenance Tips

- Place motorcycle on its centre stand on a firm flat surface.
- Start engine and warm up for 2 minutes.
- Keep a clean tray below the engine.
- Remove primary drain cap to drain oil & clean suction filter screen, magnet.
- Then remove secondary drain plug to drain oil & clean the magnet.
- Finally remove the primary drain bolt (Under the crankshaft) to drain complete engine oil.

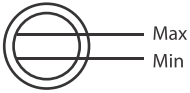


- Remove the oil filter paper element on the Crankcase Cover RH. Allow the oil to drain by tilting the motorcycle to both sides.
- Wash the drain plug, primary drain bolt and the suction filter thoroughly then refit on the crankcase after all the oil is completely drained out.
- Soak a new oil filter paper element in the oil and refit on the Crankcase Cover RH, before replacing the same.
- Fill recommended oil to engine till the oil level is upto "MAX' level mark in the oil window in Crank case Cover RH.



NOTE:

Always replace oil filter paper element when ever oil is being replaced.



CAUTION:

Filling up oil over "MAX" mark may cause smoke, spillage or loss of power. DO NOT allow oil level to fall below "MIN" mark. Doing so may result in engine internal damage or malfunction.

Minor Maintenance Tips

SPARK PLUG

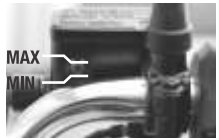
Cleaning and adjusting gap (Refer Periodical Maintenance Chart for frequency).

- Remove HT Lead and the spark plug from the cylinder head using the plug spanner and Tommy bar.
- Clean the insulator tip and electrodes of the plug carefully using a pointed scraper or spark plug cleaner.
- Set the gap between 0.70 to 0.80 mm.
- Refit the spark plug on the cylinder head and connect H.T. Lead.

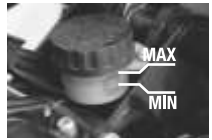
BRAKE FLUID

Check if oil is below 'MIN' level. To top Up, remove cover and diaphragm, then top up upto ' MAX ' level with DOT 3 or DOT 4 as specified.

Front Disc



Rear Disc



CAUTION

Please take care that it does not spill over any other parts of the motorcycle. Please wipe the spilled brake fluid immediately, if there is any spill over, using a soil cloth (preferably a wet cloth) to avoid damage to paint work or other parts.

Don't Mix DOT 3 & DONT 4 Brake Fluid together

INSPECTION OF TYRES AND WHEELS

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

Minimum tread depth	
Front tyre: 1mm	Rear tyre : 2 mm

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

Minor Maintenance Tips

- Bald spots / swelling may be caused by internal damage. Replace the tyres, if defective.
- Replace tyres when the tread depth has reached the minimum as specified.
- 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.
- Whenever a new tyre is installed, ensure rim and spokes do not get damaged on account of using wrong levers.
- Use only standard tyres & tubes inflated to correct pressure.

TYRE PRESSURE

	Front	Rear
Solo	1.41 kg/cm^2 (20 PSI)	2.11 kg/cm^2 (30 PSI)
With Pillion	1.55 kg/cm^2 (22 PSI)	2.25 kg/cm^2 (32 PSI)

Warning

Tyres, rims and air valves must be correctly matched to wheel rims. See your Royal Enfield Dealer. Mismatching tyre, tubes, rims and air valves may result in damage to the tyre bead during mounting, allow tyre slippage on the rim and cause tyre failure.

FRONT WHEEL REMOVAL

- Place the vehicle on center stand.
- Place a wooden block in front end of the engine to support the vehicle.
- Remove the Speedo sensor cable from the cable guide (Near Front Mudguard) by expanding the clip end as shown.

Minor Maintenance Tips

- Loosen the pinch bolt on the RH Fork by using 6mm Allen key.

- Remove the Front wheel spindle nut by using 24mm spanner along with washer and hold the RH end by using 16 mm spanner.

- Gently tap and remove the front wheel spindle.

- Remove the LH side Spacer.

- Remove the speedo sensor assembly from front wheel hub.

- Tilt the vehicle to RH side and take out the wheel.

CAUTION

Do not press 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 in between the brake pads to avoid pads activation in the event the front brake lever is accidently pressed.

Minor Maintenance Tips

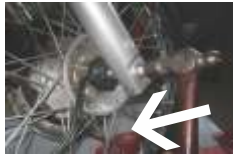
FRONT WHEEL ASSEMBLY

- Remove the wooden piece/Card board sheet placed between the brake pads.
- Insert the wheel between the front fork ends. Ensuring the brake disc is located between the brake pads.

- Place the speedo sensor assembly into front wheel hub.

- Place the speedo sensor cable in the cable guide (Near Front Mudguard) by expanding the clip end.
- Insert the LH side spacer in between front hub and LH side fork.

- Insert and tap the front wheel spindle gently.



- Refix and tighten the front wheel spindle nut by using 24 mm spanner along with washer and holding RH end by using 16mm spanner.

Minor Maintenance Tips

- Rotate the wheel and check for smooth rotation.
- Tighten the pinch bolt on RH fork by using 6m Allen key.

- Press brake lever 2 or 3 times to check front brake efficiency.

REAR WHEEL REMOVAL

- Place the vehicle on center stand on a firm and flat surface.
- Note the alignment index marks in the both side of swing arm.

- Remove split pin and castle nut on the RH side.

- Remove wheel spindle from LH side as shown.

- Remove the brake hose pipe from the swing arm clips.

Minor Maintenance Tips

- 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 LH side spacer from rear wheel hub.

- Tilt vehicle to RH side and slide out rear wheel.

REAR WHEEL ASSEMBLY

- Ensure the four cush rubbers are in position inside the rear wheel hub

- Tilt vehicle to RH side and insert the wheel assembly between the swing arms.

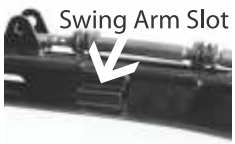
Minor Maintenance Tips

- Position the rear wheel with cush rubbers on the rear chain sprocket.

- Fix the LH side spacer in Rear wheel hub.

- Remove the wooden piece/ card board sheet in between the brake pads.

- Insert the caliper assembly with bracket by matching the slots given in the caliper and swing arm.



NOTE

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

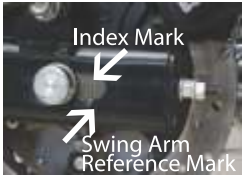
- Align the caliper bracket, wheel and swing arm holes all are in one line.

- Insert and tap the rear wheel axle gently form LH side.

Minor Maintenance Tips

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

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



- Tighten the castle nut and ensure that the pin hole on axle shaft and slot on castle nut are aligned to enable split pin fitment.

- Fix the split pin and lock it properly.

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

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

Minor Maintenance Tips

REAR BRAKE PAD REPLACEMENT

- Once you remove the rear wheel axle then pull out the caliper assembly from swing arm. (Ref Rear wheel removal and assembly Page No. 60)

- Remove the clip hanger from the caliper assembly by using combination plier.

- Remove the pad pin from the caliper assembly by usingcombination plier.
- Remove the worn out brake pads from the caliper assembly

- Clean the caliper assembly by dry/clean cloth.

- Place the new brake pads in caliper assembly as shown.

- Insert the pad pin in caliper assembly by using combination plier

Minor Maintenance Tips

- Insert the clip hangers in caliper assembly

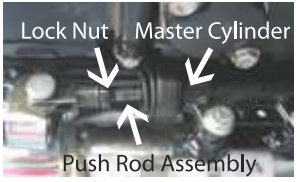
- Finally insert the caliper assembly with bracket into the swing arm slot

NOTE

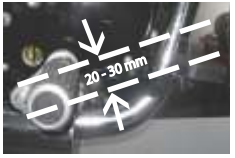
For further process pls Ref. Page No. 61

REAR BRAKE PEDAL FREE PLAY ADJUSTMENT

Adjuster Location as Shown in fig.



- The recommended brake pedal traval is 20 to 30 mm.



- If not, Follow the below procedure.

- Loosen the lock nut in master cylinder push rod assy.

- Rotate the master cylinder push rod anti clockwise to reduce the rear brake pedal free play as showm in fig.

Minor Maintenance Tips

- Rotate the master cylinder push rod clockwise to increase the rear brake pedal free play as showm in fig.

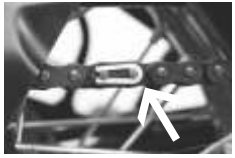
- After adjustment tighten the lock nut in master cylinder push rod assy.

NOTE

In case found difficulty contact Dealer Work Shop / ASP.

DRIVE CHAIN LOCK FITMENT

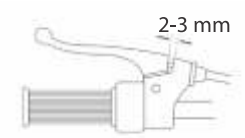
The open end of the chain master link lock should face opposite to normal direction of chain rotation.

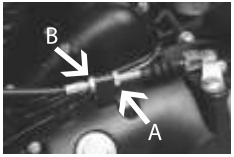


Warning

The fitment of lock in wrong direction can lead to falling off of chain link thus disengaging the drive.

ADJUSTMENTS - CLUTCH





Clutch lever (Free play 2-3 mm at pivot)

- Loosen the cable outer lock nut (A).
- Turn the Nut (B) Clockwise to reduce the play or Anticlockwise to increase the free play.
- Check free play 2 to 3 mm at Clutch lever pivot on handle bar end as shown in above fig.
- Tighten lock nut (A) after adjustment is done.

REAR BRAKE LIGHT SWITCH ADJUSTMENT

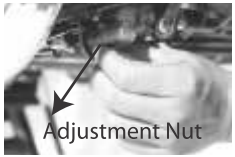
The brake light is activates once you press the brake pedal. If not, adjust the rear brake light switch as follows.

Before adjust the switch check the rear brake pedal free play, brake light switch wire connection, switch spring

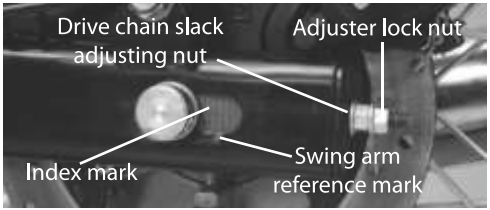
Minor Maintenance Tips

bent, broken and connection into brake pedal bracket. If its ok then do the adjustment.

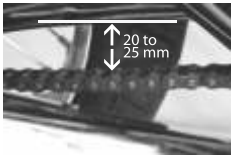
1. Turn the brake light switch adjustment nut while holding the rear brake light switch body in position.
2. If brake light glows after pressing the pedal more than 25mm. Turn the adjusting nut in anti-clockwise direction by 2 to 3 threads and check for brake light function.
3. If brake light continuously glows - Turn the adjusting nut in clockwise direction by 2 to 3 threads.



DRIVE CHAIN FREE PLAY (20 – 25 mm)



1. Place motorcycle on its center stand on a firm & flat surface.
2. Shift the gear into the neutral position.
3. Measure the drive chain free play as shown. The drive chain free play is 20 to 25 mm.



4. If the drive chain free play is incorrect adjust as follows:
   a. Remove the split pin from the castle nut .
   b. loosen the castle/spindle nut .

Minor Maintenance Tips

c. loosen the locknut of both end of the swing arm.

d. To reduce the free play, turn the drive chain slack adjusting nut in clockwise direction RH side.

e. To increase the free play, turn the drive chain slack adjusting nut in anticlock wise direction and push the rear wheel forward.

f. Check the front and rear wheels correctly aligned.

g. Check and ensure the alignment marks on each side of the swing arm.

h. Finally Torque the Castle/Spindle nut.

i. Tighten the lock nut for the chain slack adjusting nut.

Warning

chain slackness beyond 30mm will lead to chain slippage. Maintain drive chain slackness within the specified limits @ every 1000kms interval.

Minor Maintenance Tips

ADJUSTMENT OF GAS SHOCKABSORBER

- The rear gas shock absorber is of adjustable type i.e., the spring tension can be increased or reduced.
- Increase the spring tension for high load operation.
- Reduce the spring tension for low load operation.
- The adjuster provided on the bottom of the spring has five notches.
- Insert C spanner into the slot provided in the adjuster cup.
- Turn the adjuster such that the adjuster moves up to increase the spring tension and vice versa to reduce the spring tension.
- Adjust both side shock absorbers to the same notch.

Warning

Riding the motorcycle with the notches adjusted in different positions can cause loss of control.

Regularly inspect shock absorbers and front forks for leaks.

NOTE

Ensure accessories do not foul with rear shock absorber. Check for sufficient gap between the shock absorber and the attachments when the rear end of the motorcycle is fully loaded and the shock absorbers are fully compressed.

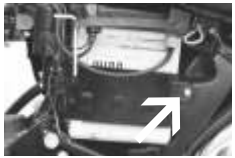
REMOVAL OF BATTERY FROM THE VEHICLE

- Unlock (turn the key clockwise) and remove the Left side panel.

- Disconnect both the terminal wires (negative and positive respectively).

Minor Maintenance Tips

- Remove the battery carrier bracket by loosening the two screws.
- Take out the battery.



Electrolyte level.
If electrolyte level is low, top up with distilled water only.

NOTE
Incase of poor contact or loose fitment of Battery terminals may cause ECU failure.

BATTERY MAINTENANCE

- The vehicle is provided with 12V - 14 AH – MF battery.
- The battery must be periodically checked for Cleanliness and corrosion free terminals.

Warning

Always disconnect the negative (-) battery cable first and then the Red positive (+) cable while removing the battery connections.

Minor Maintenance Tips

NOTE

For checking the battery voltage and electrolyte specific gravity, contact authorised Royal Enfield Dealer / service point or battery service centre.

CAUTION

- Do not use battery with low electrolyte level as the battery internal cells will get damaged.
- Do not overfill the battery electrolyte level as it will spill out through the overflow pipe and cause corrosion to vehicle parts.
- Use only distilled water meant for use in batteries to avoid damage to battery.
- Electrolyte should not be filled when the level is between minimum & maximum.

REASSEMBLY OF BATTERY ON VEHICLE

- Position the battery in the battery carrier such that the negative terminal of the battery is towards fuel pump.
- Ensure ignition switch is in "OFF" condition.

- Connect the positive terminal (Red wire) first.
- Connect the negative terminal (Black wire) next.
- Smear the terminals with petroleum jelly. (Do not use grease). Place the terminal boot / cap properly.

Minor Maintenance Tips

- Refit the battery carrier bracket by tightening the two screws.
- Refit LH side panel & lock it.

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

CAUTION
Connect the +ve and -ve cables to the respective battery terminals. Failure to do so may result in to the damage motorcycle electrical system.

CHANGING ELECTRICAL COMPONENTS
HEADLAMP BULBS REPLACEMENT.

1. Vehicle is provided with high and low beam bulbs seperately.
2. Remove the head lamp holding 2 nos. side screws.

3. Detach the bottom lug from the head lamp housing body.

4. Remove the rubber grommet (upper for High beam /another for Low beam) from the reflector assembly.

Minor Maintenance Tips

5. Disconnect High beam wire connector (Blue and Black wires).

6. Disconnect Low beam wire connector (Green and Black wires)

7. Gently press the bulb holding U clip from both the sides downward and release it from reflector slot as shown.

8. Pull out the fused bulb.

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.

Don't disturb the vent cap provided in the inner body mould.

REASSEMBLING HEADLAMP BULB.

1. Refit the new bulb (12 V 55W) into reflector unit by locating the wider protrude on the top side mounting.

Minor Maintenance Tips

2. Fix bulb holding U clip notch, then press both ends of the clip and lock in its slots.

3. Fit the rubber grommets.

4. Connect the wire couplers as mentioned below

For High beam
(Blue and Black wire
Connector)

For Low beam(Green
and Black wire connector)

5. Position the bottom lug into the head lamp housing body.

6. Fix the head lamp holding 2 nos. side screws.

NOTE

After connecting above said procedure, turn ignition switch to "ON" condition and then check, ensure that day flash light works in High Beam mode.

Minor Maintenance Tips

TAIL LAMP BULB REPLACEMENT

This model is equipped with LED tail / stop lamp. If tail / stop lamp is not working, check for electrical wire connection or you may replace the sealed tail light unit.
Contact Royal Enfield authorised dealer /ASP to replace it.

TRAFFICATOR BULB REPLACEMENT

1. Remove the screw from the trafficator housing back side.
2. Take out the lens with reflector unit.
3. Remove the plastic bulb holder by turning anti clockwise direction.

4. Remove the fused bulb by pushing it inside and turn clockwise direction.

5. Position the new bulb inside the plastic bulb holder, ensuring that the pins in the bulb match with slots in the bulb holder and rotate clockwise to fix the bulb into bulb holder.

CAUTION

Ensure that small tab of bulb holder is being aligned small knotch in the reflector unit as shown in above fig.

Otherwise by force fixing may damage the reflector unit.

Minor Maintenance Tips

6. Align the bulb holder knotch into reflector unit and turn clockwise direction to lock the bulb holder into reflector unit.

7. Refit the trafficator cover with reflector unit.

8. Tighten the screw from the trafficator housing back side.

Note

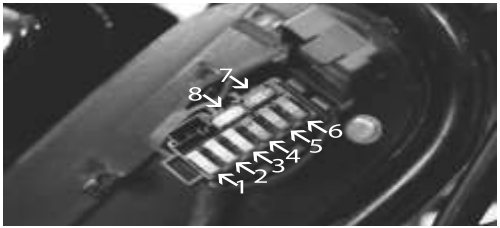
Do not over tighten the screw, otherwise the lens may break.

FUSE

1. Open the LH side decor with 4 mm Allen key available in battery carrier rubber strap.

2. The fuse box carries Qty 8 fuses (6 live fuses and 2 spare fuses).

3. Replace the blown fuse with the spare fuse available in the fuse box as per 10 or 15 Amps rating.



Minor Maintenance Tips

Warning

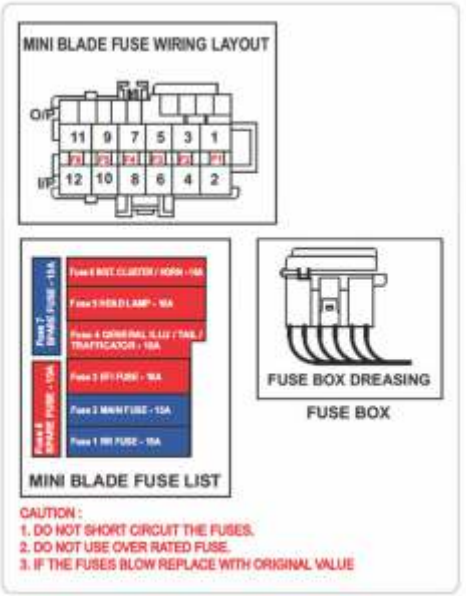
Electronic control unit (ECU) may fail due to :

a. Loose electrical wire connections or battery terminals.

b. While doing Arc welding on motorcycle, it is recommended to "Switch Off" ignition & disconnect the battery terminals, ECU coupler from Main wiring harness.

BLADE FUSE USAGE LIST

Fuse No. / colour	Amps	Application
1. Bule	15A	RR Unit (Battery charging circuit)
2. Bule	15A	Main Wiring
3. Red	10A	EFI system.
4. Red	1OA	General illumination/ Tail/Trafficator lamps
5. Red	1OA	Head Lamp
6. Red	1OA	Instrument Cluster/Horn
7. Bule	15A	Spare Fuse
8. Red	10A	Spare Fuse



Washing Procedure

PRECAUTIONS

- Wash vehicle when the engine is cold.
- Cover the silencer tail end and control switches with suitable plastic bags and tie it firmly to prevent water entry into them.
- Remove ignition key and seal key hole using adhesive tape.
- Use a suitable engine degreaser, available with your local parts store, to remove dirt or grease from the engine external parts if required. Follow the directions in the label carefully before using the degreaser.
- Use low pressure jet of water to clean the entire vehicle.
- Never spray water with great force on head lamp, Meter/cluster unit, trafficator lights, front and rear wheel hubs, electrical connections and wires, control cables, EFI components, sparkplug, battery,... etc.
- Use Luke warm water and mild detergent on the painted components to remove dirt, etc.
- Rinse vehicle thoroughly with plain water to remove the detergent and wipe vehicle dry.
- If possible, use compressed air and blow off water particles from the obscure areas of the vehicle, electrical connections, EFI components etc.

AFTER WASHING

- Ensure the vehicle 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
- Polish the painted and plated surfaces using polishing wax.
- Start the bike and allow engine to idle & warm up.
- Drive the motorcycle slowly, applying both brakes intermittently to dry up the brake pads.

Warning

Observe warnings and cautions given on labels of cleaning compounds.

Storage Precautions

Incase your Motorcycle is not going to be used for a month or more, we advise the following precautions to be taken

- Carryout required repair/adjustments on the motorcycle.
- Wash the motorcycle thoroughly and lubricate as per the maintenance chart.
- Start the engine, warm up for a few minutes and switch off.
- Drain out the fuel completely from the fuel tank and fuel lines.
- Remove spark plug. Pour in about 20 ml of clean engine oil through spark plug hole. Close the hole and crank engine several times and refit sparkplug.
- Clean rear chain thoroughly and apply a thin film of lube oil.
- Remove battery from the bike. Clean the terminals free of corrosion.
- Maintain electrolyte level between max or min mark, by adding distilled water and wipe the battery dry.
- Store the battery in a cool, dry and well ventilated place.
- Do not place the battery in direct sun light, near open flame or where temperature is above 40°C or below 0°C
- Cover the silencer with plastic bags to prevent moisture entry. Set the motorcycle on its center stand.
- Apply anti rust solution on all chrome 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 keep it covered to prevent dust settling on it.

Note

Contact Royal Enfield dealer for purchase of approved Bike cover.

Storage Precautions

PREPARING THE MOTORCYCLE FOR REUSE

- Remove anti rust solution from all chrome plated parts and clean the motorcycle.
- Inflate the tyres to the correct tyre pressure.
- Ensure battery is fully charged and proper electrolyte level is maintained.
- Connect the battery.
- Lubricate all control cables and pivots.
- Check proper level of oil in engine.
- Fill fuel tank with fresh petrol.
- Check fuel line for any cracks or cuts.
- Clean the air filter.
- Remove plastic covering from the silencer.
- Remove spark plug on cylinder head and pour in a few drops of engine oil. Crank engine a few times to lubricate cylinder walls and piston. Clean spark plug and refit.
- Switch "ON" ignition switch.
- Start vehicle and warm up engine for a few minutes before riding the vehicle.

NOTE

Do not raise the engine rpm the moment it is started, but allow the engine to run at Idling speed.

CAUTION

Proper long-term storage is important for the safe, trouble-free operation of your Royal Enfield motorcycle.

Long Trip Precautions

CHECKS PRIOR TO THE COMMENCEMENT OF LONG JOURNEY

- Service the motorcycle thoroughly at Royal Enfield Dealer / Authorised Service Point as per periodical maintenance chart. (Ref. Page No. 50)
- Sufficient quantity of petrol in the fuel tank for the journey planned.
- Check and correct tyre pressure if necessary.

CHECKS AFTER EVERY 1500 KMS OF RUN

- Tightness of all fasteners.
- Tyre treads condition and wear of tyres.
- Battery condition and electrolyte level.
- Correct oil level in engine.
- Working of all lights and horn.
- Proper drive chain tension.

ITEMS TO BE CARRIED

- Tool kit.
- First aid kit.
- Bulbs for Headlight, Trafficator light & Mini Blade Fuse (15 & 10 Amps).
- Accelerator, Choke & Clutch cable
- Rear chain master link lock assembly.
- Spare tube and puncture repair kit - cold vulcanising type.
- Foot operated Air Pump.
- Insulation tape.
- Spark plugs (M14 & M10)
- Fuel hose.

Regional & Area Offices

R1 : Chandigarh, H.P, J&K, Punjab

Royal Enfield
SC0-269, Second Floor, 16 Sector,
PANCHKULA (Haryana)
Pin Code - 134 113,
Ph: 0172-5011255, 5011251

R2 : Delhi, Haryana, NCR & Rajasthan

Royal Enfield
C/O EICHER ENGG. COMPONENTS
Plot No. 7, HSIDC Industrial Area,
Sector 18, Palam Gurgaon Road,
GURGAON (Haryana) - 122 015,
Ph: 0124-4278138 / 4278139
Fax: 4382148

Royal Enfield
G-5, 6,7, Gitanjali Towers,
Ajmer Road, JAIPUR - 302 006.
Ph: 141-5143434 / 4034748
Fax: 0141-5125657

R3 : Bihar, Uttaranchal & Uttar Pradesh

Royal Enfield
UGF-109, Cross Road Plaza,
Badshaha Nagar Chauraha,
Near Flyover, Faizabad Road,
LUCKNOW - 226 006.
Ph: 0522-4004640 Fax: 4005973

R4 : Assam, N.E. & West Bengal

Royal Enfield
C/O V.E.Commercial Vechicle Ltd.
1st Floor, P.S.Tower,
No. 13, Bondel Road,
KOLKATA - 700 019
Tel: 033-40060206 / 0209
Mob: 09748664010 / 09830935285

R5 : Gujarat & M.P

Royal Enfield
B-306, Shapath-IV,
Opp. Karnavati Club,
S.G. Highway.
AHMEDABAD - 380 015,
Ph: 079-29086118, Fax: 079-40024461

R6 : Goa & Maharastra

Royal Enfield
Plot No, 16, Sector - 1
Sion Panvel Highway, Nerul,
NAVI MUMBAI - 400 706.
Ph: 022-27700395, 27700501

Royal Enfield
203, 204 Sneha ganga,
New Vega Centre,
Shankar Seth Road, Swargate,
PUNE - 411 037.
Ph: 020-40028090, Fax: 24447174

R7 : A.P, Chattisgarh, Jharkhand & Orissa

Royal Enfield
Plot No.3,
Kandukuri Business Chambers
Sunder Nagar Colony
Beside ESI Hospital|
Erragadda
Hyderabad – 500038
Landline No: 040 - 40213540

Royal Enfield
A Unit of Eicher Motors Ltd.
407, 4th Floor, Nirmal Plaza,
Forest Park, BHUBANESWAR - 751 009.
Ph: 0674-6540206

R8 : Karnataka, Kerala, Tamilnadu & Puducherry

Royal Enfield
Plot No. 350 to 354,
1st Floor, 4th Link Street,
Nehru Nagar, Kottivakkam,
(OMR-IT Highway)
CHENNAI-600 096.
Ph: 044-42070661,24540855,
2450828

Royal Enfield
Door No.2067/1, 2068/2
East End"A"Main
9th Block, jayanagar,
BANGALORE - 560 069.
Ph: 22440588 / 41753277/
41536488

Royal Enfield
25/85A,Opp. to IOC Pump,
Koonamthai, Edappally Post,
KOCHI - 682 024.
Ph: 0484 - 6494990
Fax: 2543616

Complete Wiring Diagram

PASTE THE WIRING DIAGRAM

NOTE

Complete Wiring Diagram is attached on this page.

VEHICLE STARTING PROCEDURE

Basic Guidelines to be followed "FOR ALL ELECTRIC START VEHICLES".

1. When ignition key is switched "ON", please wait until the malfunction indicator lamp (MIL) goes off, before attempting to start.
2. In cold condition of the engine or for initial start. It is advised to use Kick Start (KS) only.
3. Apply choke in cold start condition. (Ambient temperature <25°C)
4. Do Not Attempt — "HALF START" by casually pressing electric start buttons.
5. Please press and hold electric start button for atleast 3 seconds continously for the cranking or until the engine fires and sustains, whichever is earlier
6. If engine doesn't start in the first attempt, release the ES button and repeat the above procedure.
7. It is advised not to apply excessive throttle during starting.

Trouble Shooting

Warning

The trouble shooting section of this Owner's Manual is intended solely as a guide to diagnosing problems. Carefully read the appropriate sections of this manual before performing any work. Repair and maintenance operations not listed in this Owner's Manual should be performed by your Royal Enfield Dealer only. Improper repair / maintenance could result in the motorcycle not functioning properly or serious injury.

Warning

Electronic Control Unit (ECU) may fail due to the following reasons:

a. Loose electrical / sensors wire connectors / couplers or Battery terminals.

b. While doing Arc welding on Motorcycle, Its is recommended to "SWITCH OFF" ignition, disconnect the Battery terminals & ECU coupler from Main Wiring Harness.

Trouble Shooting

CAUSES	REMEDIES
I. ENGINE FAILS TO START	
1) Stop switch in "OFF" Position	Push stop switch to "ON" position.
2) Vent pipe blocked / pinched while routing.	Clean vent pipe or route properly.
3) Spark plug cap / lead not connected	Fix cap / lead firmly
4) Spark plug electrode dirty / fouled	Clean spark plug.
5) Spark plug insulation cracked	Replace spark plug
6) Clutch slipping	*Adjust clutch cable free play

CAUSES	REMEDIES
II. ENGINE MISFIRING	
1) Water in petrol tank	*Clean petrol tank. Fill tank with fresh petrol.
2) Loose sparkplug cap	Fix cap / lead firmly
3) Spark plug fouled	Clean spark plug or non specified heat range plug.
4) Any sensor loose connections	*Check MAP, EOT or TPS sensor wiring /coupler loose connections

Trouble Shooting

CAUSES	REMEDIES
III. POOR PICKUP	
1) Accelerator cable free play excessive	Adjust cable free play
2) Choked air filter	Clean / Replace air filter
3) Rear chain adjusted too tight	*Re-adjust properly
4) Clutch Slipping	*Adjust clutch cable free play
5) Under inflated tyres	*Inflate to correct pressure

CAUSES	REMEDIES
IV. WHITE/BLUE SMOKE	
1) Oil level in sump above the Top / Max line in the oil level window	*Check and drain excess oil *Worn out valve stem oil seal.
V. ENGINE OVERHEATING	
1) Cylinder fins not clean	Clean the cylinder fins at regular intervals
2) Clutch slipping	*Check and correct
3) Low engine oil level	Check and top-up if necessary

Trouble Shooting

CAUSES	REMEDIES
VI. EXCESSIVE FUEL CONSUMPTION	
1) Fuel leakage	*Check and rectify, tank float unit, drain pipe, breather pipe, fuel line / pump.
2) Choked air filter	Clean / Replace
3) Under inflated tyres	Inflate to correct pressure
VII. BRAKES POOR	
1) Spongy brake	*Fill brake fluid & remove air from the system.
2) Oil/grease on disc	*Clean and refit
3) Brake pad worn / Uneven wear	*Replace Brake pads

CAUSES	REMEDIES
VIII. VEHICLE WOBBLES	
1) Wheel rim runout	*Rectify
2) Loose / Broken spokes	*Tighten / Replace spokes
3) Tyres not fitted correctly	*Refit tyres correctly
4) Wheels misaligned	*Ensure proper alignment
5) Under inflated tyres	Inflate to correct pressure
IX. ELECTRICALS	
Bulbs do not glow	
1) Loose / improper connection	*Check and correct

Trouble Shooting

CAUSES	REMEDIES
2) Bulb fused	*Replace bulb
3) Fuse blown	Check and Replace fuse
Horn not working	
1) Loose connections	Check and correct
2) Fuse blown	Check and correct
Trafficators not working	
1) Loose / improper connections	Check and correct
2) Bulb fused	Replace

CAUSES	REMEDIES
Brake light remains on	
1) Switch link not adjusted properly	*Adjust connecting links properly
2) Switch sticky	*Replace switch
X. ELECTRONIC FUEL INJECTION (EFI)	
Malfunctioning IndicatorLamp (MIL) glowing continuously	
1) Sensor Coupler Loose Connection	*Check for any EFI sensor coupler loose connection and correct them
2) Any EFI Sensor Failure	*Check & replace the same

Trouble Shooting

CAUSES	REMEDIES
XI. INSTRUMENT CLUSTER	
1) Needle Flickering or not working	*Replace Cluster Unit
2) Hazard, Set and Select button not working / struck up	*Replace Cluster Unit
3) LCD Display not working	Check for wire connection and fuse Check for Battery voltage
4) a. Teltale indicator (Excluding Neutral /Side stand) not working	*Replace Cluster Unit
b. Side stand / Neutral indicator not working	*Replace Bulb

CAUSES	REMEDIES
XII. LCD DISPLAY PANEL	
1) Fuel leval indicator not working	*Contact Dealer
2) Odometer / Clock not working	*Contact Dealer
3) Service Reminder / Battery low voltage indicator continuously blinking	*Contact Dealer

***Contact Dealer / Authorised Service Point**

Warranty

Royal Enfield Motor Cycles are manufactured by following best Quality practices in respect of the material and workmanship.

Royal Enfield (RE) warrants THUNDERBIRD 500 EFI Motor Cycle to be free from manufacturing and material defect under normal use subject to following conditions.

1. RE will replace or repair defective part / parts at their Dealers. Authorised Service Point, free of charge within a period of 12 months from the date of sale (date of Installation) or 10,000 kms whichever occurs earlier.

2. The warranty is applicable only to first registered owner.

3. The warranty shall be applicable only if all the free services are availed at the respective period / Kilometers range as per the schedule given in the owner's manual from RE Dealers / Authorised Service Points.

4. During the warranty period, RE's obligations shall be limited to repairing / replacing free of charge such part or parts of the vehicle, which on examination to have manufacturing defect. Such defective part / parts which have been replaced becomes property of RE.

5. Cost of oil, oil filter, fuel and other consumables are chargeable to the customer.

6. Claims on proprietary items like tyres, tubes, spark plug, battery etc. should be taken up with respective manufacturer or their authorised agents in the area directly by customer. RE shall not be liable in any manner to replace them though their

Warranty

Dealers will provide assistance in preferring such claims on their manufacturer.

7. Warranty shall not apply to:

   (a) Normal ageing, detonation or rusting of plated parts paints coat, rubber parts, soft items, glass items & plastic parts etc.

   (b) Components like fuel line, oil filter element, control cables, brake pads, clutch plates, which are subjected to normal wear and tear.

   (c) Damages due to use of lubricant / oil / grease etc., other than specified by RE.

   (d) Damages due to use of non-genuine parts.

   (e) Damages due to lack of proper maintenance of the vehicle.

   (f) Damages due to incorrect driving or riding habits.

   (g) Parts damaged due to accidents, collision, abuse etc.

   (h) Irregularities not recognized as affecting the quality or function of the vehicle such as slight vibration, oil leakage, discoloration of exhaust bent pipe / silencer / soft or hard shock absorber etc.

Warranty

(i) Defects arising from fitment of unauthorised / additional Electrical loads.

(j) Vehicle serviced/ repaired at unauthorised service points.

(k) Vehicle used for competition / racing.

(l) Electrical component like bulbs, fuses etc. & Electronic components (ECU) failure due to repairs by arc welding.

(m) Normal maintenance operations like adjustment of brakes, cleaning fuel system, engine tune up and other such adjustments.

8. RE reserves the right to finally decide on all warranty claims.

9. RE reserves the right to make changes in Design of the vehicle without any obligation to install these changes on previously supplied vehicles.

NOTE: No warranty for stone black colour, against gloss, scratches, fade...etc., Complaints.

Emission Warranty

In compliance with the provisions of Rule 115(2) of the Central Motor Vehicle Rules, 1989, Royal Enfield certifies that the following warranty is applicable to those components liable to affect the emission of the gaseous pollutants in its range of motorcycles, in normal use to which it may be subjected to.

This emission warranty comes into force from 01st July 2001 and is valid for a period of 30,000 Kms. or 36 months, whichever occurs earlier, from the date of sale to the first customer and is in addition to and parallel to the warranty policy, conditions and obligations laid down in the Owner's Manual.

Royal Enfield further warranty that if on examination by its Authorised Service Point, the motorcycle fail to meet the specified emission standards, then the Authorised Service Point shall take necessary corrective measures and shall at its sole discretion, repair or replace free of charge such components of the emission control system to meet the required emission standards.

The method's of examination to determine the warranty conditions of the emission warranty related components will be at the sole discretion of Royal Enfield / Authorised Service Points and results of such examination will be final and binding. If on examination the warranty conditions of the parts are not established, Royal Enfield will have the right to charge all, or part of the cost of such examination to the customer in addition to the cost of the components.

In case of acceptance of the component's under Emission warranty, Royal Enfield will replace free of charge, the component's as required. However, the consumables like fuel, lubricants, solvents, etc. shall be chargeable to the customer as per actual. In case any of the components covered under emission warranty or the associated parts, are not independently replaceable, Royal Enfield will have the sole discretion to replace either the entire assembly or parts of the assembly, through suitable repairs.

Emission Warranty

Royal Enfield reserves the right to carry out necessary consequential repairs to the motorcycle or replace any part, in addition to the repair or replacement of the components covered under emission warranty, to establish compliance to in-use emission standards. Such repairs / replacements will be chargeable to the customer.

All parts removed for replacement under warranty will become the property of Royal Enfield.

Royal Enfield will not be responsible for the cost of transportation of the motorcycle to the nearest Dealer / Authorised Service Point or for any loss due to non availability of the motorcycle during the period of examination and repairs by Royal Enfield and / or their Authorised Service Points.

Royal Enfield will not be responsible for any penalties that may be charged by statutory authorities on account of failure to comply with the in-use emission standards.

That costs incurred to check emission of the motorcycle will have to be borne by the customer.

Emission warranty will be applicable irrespective of the change of ownership of the vehicle provided all the conditions as laid down in this document are met from the date of original sale of the motorcycle.

THE WARRANTY SHALL APPLY IF THE CUSTOMER

- Observes all the important instructions and any other precautions listed in the owner's manual.
- Under all circumstances uses lubricants and fuel as recommended by Royal Enfield.
- Regularly obtains and carries out maintenance in accordance with Royal Enfield guidelines and enters the details in the Log book.

Emission Warranty

- Immediately approach the nearest Dealer/ Authorised Service Point upon discovery of failure to comply with the IN-USE emission standard in spite of having maintained and used the vehicle in accordance with the instructions in the owner's manual and having carried out such repairs and adjustments as may be required with a view to establish such compliance.
- Produce the Pollution Under Control' certificate valid for the period immediately preceding the test during which the failure is discovered, the test having been carried out either for obtaining a new certificate or pursuant upon being
- Produce the Owner's Manual and Log book for verification details.
- Produce receipts covering maintenance of the motorcycle is specified in the owner's manual from the date of original purchase of the vehicle.
- Produce valid certificate of Insurance and R. T. O. registration certificate.

THE EMISSION WARRANTY SHALL NOT APPLY IF

- A valid "Pollution under control" certificate is not produced.
- The motorcycle is not serviced by Dealer/ Authorised Service Points as per the service schedule described in the maintenance chart.
- The motorcycle has been subjected to abnormal use, abuse, neglect and improper maintenance or has met with an accident.
- Replacement parts not specified and approved by Royal Enfield have been used.
- The odometer is not functioning or the odometer and / or its reading has been changed / tampered with, so that the actual distance covered cannot bereadily determined.
- The motorcycle has been used for competitions, races, and rallies or for the purpose of establishing records.

Emission Warranty

- On examination by Royal Enfield or its Dealer/ Authorised Service Points, if the motorcycle shows that any of the conditions stipulated in the Owner's manual with regard to use and maintenance have been violated.
- The motorcycle has been run on adulterated / leaded fuel or lubricant other than those specified by Royal Enfield in the Owner's manual or any other document given to the customer at the time of sale of the motorcycle.
- The emission related components are tampered with local repairs.
- All service and parts related bills and vouchers incurred during the tenure of the emission warranty is not produced.
- All maintenance activities carried out on the vehicle during the tenure of the emission warranty is not entered in the log book.

TIPS TO BE ON THE RIGHT SIDE OF LAW

- Always get your vehicle checked to meet the emission regulations through and authorised emission checking centre.
- Always carry a valid "Pollution Under Control" certificate with you at all times during the validity of the emission warranty (30,000 Kms /3 years from the date of first sale).

TIPS TO REDUCE POLLUTION

1. Ensure that the periodical maintenance is carried out as stipulated in the owner's manual through a Royal Enfield Authorised Service Point.
2. Use only Unleaded petrol (>91 octane) from reputed fuel pumps.
3. Ensure the fuel used is not adulterated.
4. Use correct spark plug as recommended in the owner's manual
5. Use lubricants as per recommendations given on grade / brand in the owner's manual.

Free Service Coupons

It is our endeavour to provide excellent service to your Royal Enfield Motor Cycle at all times. Towards this we provide four free services at specific Intervals.

Please avail these services at the specified time, in any of the Royal Enfield dealerships / Authorised Service Points nearest to you and as a token of satisfactory service, kindly return the free service coupon duly filled in and signed, to the service outlet.

Availing the free services in the specified time is a prerequisite to warranty consideration.

The cost of fuel, oil, oil filter element, grease etc. are used for free service is chargeable to the customer.

1st Free Service

1st FREE SERVICE

500 Kms
or
45 ± 8 days
whichever is earlier from the date of sale.
Enter the Details in Free Service Record.
(Cost of oil, oil filter element and other consumables used are chargeable to the customer

500 KMS OR 45 ± 8 DAYS WHICHEVER IS EARLIER FROM DATE OF SALE

Customer Name : Dealer Code: ☐☐☐☐

Address :

Frame No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Engine No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Vehicle Installation From No : ☐☐☐☐☐☐☐☐☐☐

ODO Reading : ☐☐☐☐☐☐☐

Reg No : ☐☐☐☐☐☐☐☐☐☐

Sale Date : ☐☐☐☐☐☐☐☐

Service Date: ☐☐☐☐☐☐☐☐

Service by:
(Dealer's ASP NAme & Address)

Sold by (Dealer's Name & Address)

Received the above vehicle after the service having been done to my entire satisfaction.

Customer Signature: _____ Date: ☐☐☐☐☐☐☐☐

Contact Phone / Mobile No. : ☐☐☐☐☐☐☐☐☐☐

1st Free Service Activities

1. Water wash the vehicle and dry it with a clean cloth	
2. Electrolyte	Check level & top-up
3. Battery terminals	Clean and apply petroleum jelly
4. Drive chain free play	Check, clean, lubricate & adjust
5. Rear brake pedal pivot	Lubricate
6. Front & Rear brake	Check & top up brake fluid level
7. Wheel rim Front & Rear	Check spokes tightness
8. Front fork oil	Inspect for leakage
9. Air Filter element	Clean
10. Spark plugs(2Nos)	Check, clean & adjust gap
11. H.T. Leads	Inspect for cracks
12. Fuel pump	Check mounting screws / Leak
13 Fuel hose	Inspect for cracks
14. Rubber hose, Air filter to throttle body	Inspect for cracks
15. Accelerator cable	Adjust play
16. Clutch cable	Adjust play
17. Engine oil sump strainer	Clean
18. Engine oil	Replace
19. Engine oil filter paper element	Replace
20. Hand levers & kick starter pivot	Lubricate

CUSTOMER COPY

Job Card No.:

Date:

Odo Reading:

Name of Dealer/
ASP with Code:

ASP / Dealer's
Stamp & Signature

2nd Free Service

2nd FREE SERVICE
3000 Kms
or
90 ± 15 days
whichever is
earlier from the
date of sale.
Enter the Details
in Free Service
Record.
(Cost of oil,
oil filter element
and other
consumables
used are
chargeable to
the customer

3000 KMS OR 90 ± 15 DAYS WHICHEVER IS EARLIER FROM DATE OF SALE

Customer Name : Dealer Code: ☐☐☐☐

Address :

Frame No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Engine No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Vehicle Installation From No : ☐☐☐☐☐☐☐☐☐

ODO Reading : ☐☐☐☐☐☐☐

Reg No : ☐☐☐☐☐☐☐☐☐☐

Sale Date : ☐☐☐☐☐☐☐☐

Service Date: ☐☐☐☐☐☐☐☐

Service by:
(Dealer's ASP NAme & Address)

Sold by (Dealer's Name & Address)

Received the above vehicle after the service having been done to my entire satisfaction.

Customer Signature: _____ Date: ☐☐☐☐☐☐☐☐

Contact Phone / Mobile No. : ☐☐☐☐☐☐☐☐☐☐

2nd Free Service Activities

1. Water wash the vehicle and dry it with a clean cloth	
2. Electrolyte	Check level & top-up
3. Battery terminals	Clean and apply petroleum jelly
4. Drive chain free play	Check, clean, lubricate & adjust
5. Rear brake pedal pivot	Lubricate
6. Front & Rear brake	Check & top up brake fluid level
7. Wheel rim Front & Rear	Check spokes tightness
8. Front fork oil	Inspect for leakage
9. Air Filter element	Clean
10. Spark plugs(2Nos)	Check, clean & adjust gap
11. H.T. Leads	Inspect for cracks
12. Fuel pump	Check mounting screws
13. Fuel hose	Inspect for cracks
14. Rubber hose, Air filter to throttle body	Inspect for cracks
15. Accelerator cable	Adjust play
16. Clutch cable	Adjust play
18. Engine oil	Check Level & Top -Up
20. Hand levers & kick starter pivot	Lubricate

CUSTOMER COPY

Job Card No.:

Date:

Odo Reading:

Name of Dealer/
ASP with Code:

ASP / Dealer's
Stamp & Signature

3rd Free Service

3rd FREE SERVICE
6000 Kms
or
180 ±15 days
whichever is earlier from the date of sale.
Enter the Details in Free Service Record.
(Cost of oil, oil filter element and other consumables used are chargeable to the customer

6000 KMS OR 180 ± 15 DAYS WHICHEVER IS EARLIER FROM DATE OF SALE

Customer Name : Dealer Code: ☐☐☐☐

Address :

Frame No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Engine No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Vehicle Installation From No : ☐☐☐☐☐☐☐☐☐

ODO Reading : ☐☐☐☐☐☐☐

Reg No : ☐☐☐☐☐☐☐☐☐☐

Sale Date : ☐☐☐☐☐☐☐☐

Service Date: ☐☐☐☐☐☐☐☐

Service by:
(Dealer's ASP NAme & Address)

Sold by (Dealer's Name & Address)

Received the above vehicle after the service having been done to my entire satisfaction.

Customer Signature: _____ Date: ☐☐☐☐☐☐☐☐

Contact Phone / Mobile No. : ☐☐☐☐☐☐☐☐☐☐

3rd Free Service Activities

1. Water wash the vehicle and dry it with a clean cloth	
2. Electrolyte	Check level & top-up
3. Battery terminals	Clean and apply petroleum jelly
4. Drive chain free play	Check, clean, lubricate & adjust
5. Rear brake pedal pivot	Lubricate
6. Front & Rear brake	Check & top up brake fluid level
7. Wheel rim Front & Rear	Check spokes tightness
8. Tyre Front & Rear	Check wear & tread depth
9. Air Filter element	Clean
10. Spark plugs(2Nos)	Check, clean & adjust gap
11. Throttle body - Cleaning Spray*	Clean
12. H.T. Leads	Inspect for cracks
13. Fuel pump	Check
14. Fuel hose	Inspect for cracks
15. Rubber hose, Air filter to throttle body	Inspect for cracks
16. Accelerator cable	Check & Adjust play
17. Clutch cable	Adjust play
18. Engine oil sump strainer	Clean
19. Engine oil	Replace
20. Engine oil filter paper element	Replace
21. Hand levers & kick starter pivot	Lubricate
22. PAV System	Check & Clean

*Carb cleaner / Carblick or Fuel line Cleaner Spray. (Make - Wurth or ITW Chemin)

CUSTOMER COPY

Job Card No.:

Date:

Odo Reading:

Name of Dealer/
ASP with Code:

ASP / Dealer's
Stamp & Signature

4th Free Service

4th FREE SERVICE
9000 Kms
or
270 ±15 days
whichever is earlier from the date of sale.
Enter the Details in Free Service Record.
(Cost of oil, oil filter element and other consumables used are chargeable to the customer

9000 KMS OR 270±15 DAYS WHICHEVER IS EARLIER FROM DATE OF SALE

Customer Name : Dealer Code: ☐☐☐☐

Address :

Frame No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Engine No : ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Vehicle Installation From No : ☐☐☐☐☐☐☐☐☐

ODO Reading : ☐☐☐☐☐☐☐

Reg No : ☐☐☐☐☐☐☐☐☐☐

Sale Date : ☐☐☐☐☐☐☐☐

Service Date: ☐☐☐☐☐☐☐☐

Service by:
(Dealer's ASP NAme & Address)

Sold by (Dealer's Name & Address)

Received the above vehicle after the service having been done to my entire satisfaction.

Customer Signature: _____ Date: ☐☐☐☐☐☐☐☐

Contact Phone / Mobile No. : ☐☐☐☐☐☐☐☐☐☐

4th Free Service Activities

1. Water wash the vehicle and dry it with a clean cloth	
2. Electrolyte	Check level & top-up
3. Battery terminals	Clean and apply petroleum jelly
4. Drive chain free play	Check, clean, lubricate & adjust
5. Rear brake pedal pivot	Lubricate
6. Front & Rear brake	Check & top up brake fluid level
7. Wheel rim Front & Rear	Check spokes tightness
8. Front fork oil	Replace Oil
9. Air Filter element	Clean
10. Spark plugs(2Nos)	Check, clean & adjust gap
11. H.T. Leads	Inspect for cracks
12. Fuel pump	Check
13. Fuel hose	Inspect for cracks
14. Rubber hose, Air filter to throttle body	Inspect for cracks
15. Accelerator cable	Check & Adjust play
16. Clutch cable	Adjust play
17. Engine oil	Check & topup
18. Hand levers & kick starter pivot	Lubricate
19. Steering System	Check Lubricate Steering Balls & Adjust
20. Tyres	Check wear & tread depth

CUSTOMER COPY

Job Card No.:

Date:

Odo Reading:

Name of Dealer/
ASP with Code:

ASP / Dealer's
Stamp & Signature

Paid Service/Maintenance Record

CUSTOMER COPY

12,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

12,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

15,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

15,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

DEALER / ASP COPY

12,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

12,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

15,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

15,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

CUSTOMER COPY

18,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

18,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

21,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

21,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

DEALER / ASP COPY

18,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

18,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

21,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

21,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

CUSTOMER COPY

24,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

24,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

27,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

27,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

DEALER / ASP COPY

24,000±250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

24,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

27,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

27,000±250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

CUSTOMER COPY

30,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

30,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

33,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

33,000 ± 250 Kms Service

Job Card No : ..... Date .....

Odo Reading : ..... Dealer Code .....

Brief Work Done :

Dealer's Stamp & Signature

Paid Service/Maintenance Record

DEALER / ASP COPY

30,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

30,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

DEALER / ASP COPY

33,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

CUSTOMER COPY

33,000 ± 250 Kms Service

Brief Work Done :

Dealer's Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Log Book

Sl. No.	Date	Kms	Details	Idling CO %	Dealer/Authorised Service Point	
					Job Card No.	Stamp & Signature

Notes

Notes

Notes

FORM 22

[See Rules 47(g), 115, 124(2), 126A and 127(1), 127(2)]

INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS

Certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988, and the rules made there under, including the following mass emission norms:

Brand Name of the Vehicle	:	Thunderbird 500
Chassis Number	:	
Engine Number / Motor Number (incase of Battery Operated Vehicles)	:	
Sub-Rule No. of Rule	:	115(2)(i), 115(14)(F)
Emission Norms [Bharat Stage-I/II/III/ Bharat (Term) Stage-III etc]	:	Bharat Stage III

For ROYAL ENFIELD

Quality Assurance

Date :