

# ROYAL ENFIELD OWNER'S MANUAL

---

---

*SCRAM411*

**BS VI-2022**

---

# Royal Enfield Support

---

## 1800 - 210 - 0007

1. **Roadside Assistance**
2. **Product Update**
3. **Feedback**
4. **Dealer Locator**



**To access dealer details scan the QR code**

🐦 [RoyalenfieldSupport](#) | 🌐 [support@royalenfield.com](mailto:support@royalenfield.com) | ✉️ [www.royalenfield.com](http://www.royalenfield.com)

**Download the ROYAL ENFIELD APP and explore more**



---

---

# FOREWORD

## **READY. SET. SCRAM.**

Conceived on our LS410 platform, SCRAM is a scrambler with an off-road pedigree. Bold & Playful - Lively & Engaging, it is nimble to ride, from trails to alleyways. Always ready for what comes next; without a second thought. Living life on an instinct, spontaneous & restless SCRAM 411 is all-ready to take it on.

While the Scram is all-ready, this Owner's Manual prepares you to be ready before you set out to Scram. It thoroughly covers features, capability, operation of the controls and quick fixes. For the best health and performance of your motorcycle, we highly recommend that you maintain it as per the schedule and procedures described in this manual. It should be considered a permanent part of your motorcycle and should always be stored in it, even if it is subsequently sold.

For support and information, please call 1800 210 0007 anytime between 9 AM - 9 PM, any day of the week.

—Team Royal Enfield

---

---

---

## **NOTICE**

---

All information in this manual is based on the latest product information available at the time of publication. Due to continuous improvements there may be discrepancies between the information in this manual and your motorcycle. Royal Enfield reserves the right to make production changes at any time without prior notice and without incurring any obligation to make the same or similar changes to motorcycles previously built or sold. All images shown are for reference to explain and need not to be exactly the same on the model you own. Technical specifications are subject to change without prior notice. "© Copyright 2021 Royal Enfield (A unit of Eicher Motors Ltd.). All Rights Reserved. No part of this manual shall be copied, distributed or otherwise dealt without the express permission in writing of Royal Enfield"

---

## **NOTE**

---

This motorcycle meets the BS VI emission norms.

---

## **Disclaimer**

---

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

Part No. RAM00385/A / Qty. 1000 / Oct. 2021 /

---

## CONTENTS

---

Personal and motorcycle information .....	4	Environment care .....	56
Technical specifications.....	5	Periodical maintenance chart .....	59
Recommended lubricants .....	11	Tools kit .....	66
Safety definitions.....	12	First aid kit .....	67
Motorcycle identification numbers .....	13	Minor maintenance tips .....	68
Location of key parts .....	15	Long trip precautions .....	87
Operation of controls .....	18	Shock absorber .....	88
Pre-Operational checks .....	40	Off roading .....	89
Safe & Happy riding .....	41	Washing procedure .....	90
Cargo & Accessories .....	44	Storage precautions .....	92
Rules of the road .....	46	Trouble shooting .....	93
Running in period.....	48	Warranty terms & Conditions .....	97
Warning indications & Safety systems.....	49	Emission warranty .....	100
Starting.....	53	Service / Maintenance record .....	105
Gear shifting, Riding & Stopping .....	54	Note .....	106
Parking .....	55		

## PERSONAL & MOTOR CYCLE INFORMATION

Name													
Door No. / Street													
Locality / Town													
City							Country						
Contact	Res :						Off :						
	Mobile :						Email :						
Licence No.							Valid till :						
Model							Color :						
Engine No.													
VIN. No.													
Tyre Make	Front :						Rear:						
Tyre Nos.	Front :						Rear:						
Battery make							Battery No :						
Sold by													
Date of Sale													

---

## TECHNICAL SPECIFICATIONS

---

### ENGINE

---

Engine type ..... Single cylinder, 4 Stroke, SOHC,  
Air cooled, Fuel injection

Bore ..... 78 mm

Stroke ..... 86 mm

Displacement..... 411 cc

Compression ratio.... 9.5:1

Max power ..... 24.3bhp (17.88 kW) @ 6500 rpm

Max torque ..... 32 Nm @ 4250 ± 250 rpm  
ECU / Variable

Idle rpm..... 1300 ± 100 rpm

Starting system ..... Electric Start

Air filter element ..... Paper element

Lubrication ..... Wetsump

Engine oil capacity..... 2.3 l ( Initial fill only),  
1.6-1.8 l (Subsequent refills)

---

### IGNITION SYSTEM

---

Ignition system ..... Digital electronic ignition

Spark plug ..... Bosch - UR5CC

Start spark plug gap ... 0.7 to 0.8 mm

---

## TECHNICAL SPECIFICATIONS

---

### TRANSMISSION

---

Clutch..... Wet multi plates

Secondary drive ..... 5/8" Chain & sprocket

Primary drive..... Gear

Secondary ratio..... 2.533:1

Primary ratio ..... 2.312:1

Drive chain links..... 110 links

Gear box..... 5 Speed. Constant mesh

### Gear Ratio

1<sup>st</sup> Gear ..... 1<sup>st</sup> 2.916:1

2<sup>nd</sup> Gear..... 2<sup>nd</sup> 1.833:1

3<sup>rd</sup> Gear..... 3<sup>rd</sup> 1.428:1

4<sup>th</sup> Gear..... 4<sup>th</sup> 1.173:1

5<sup>th</sup> Gear..... 5<sup>th</sup> 1.000:1

---

# TECHNICAL SPECIFICATIONS

---

## CHASSIS

---

Frame ..... Half duplex split cradle frame

Steering lock ..... In built

Suspension

Front..... Telescopic, 41 mm forks 190 mm travel

Rear..... Mono shock with linkage, 180 mm Rear  
wheel travel

Brakes

Brake system..... Dual channel ABS

Front disc..... 300 mm Dia disc.

Rear disc ..... 240 mm Dia disc.

Tyre size

Front ..... 100/90 - 19"

Rear ..... 120/90 - 17"

Tyre pressures

Solo

Front ..... 25 psi / 1.75 kg/cm<sup>2</sup>

Rear ..... 32 psi/ 2.25 kg/cm<sup>2</sup>

With pillion

Front ..... 27 psi/ 1.89 kg/cm<sup>2</sup>

Rear ..... 34 psi/ 2.39 kg/cm<sup>2</sup>

---

## TECHNICAL SPECIFICATIONS

---

Fuel type.....	Unleaded gasoline
Ethanol content.....	E10 or less
Minimum octane.....	91 RON (Research octane rating number) or Higher
Fuel tank capacity*...	15 ± 0.5 l (approx*)
Low fuel warning* ....	Fuel segment 1ST bar blinking. 4 ± 0.5 l (approx*)
Dead stock .....	0.5 l (approx*) (unusable fuel)

\* The above values are approximate and the actual capacity will vary with each fuel tank.

---

### CAUTION

---

1. The use of petrol containing more than the specified ethanol will cause the fuel tank corrosion & paint damage and will also damage the rubber tubes in the fuel line as well.
2. It is recommended to use only unleaded petrol, as leaded petrol will cause damage to the catalytic converter.

---

### ELECTRICALS

---

Fly wheel magneto .....	221 W @ 1500 rpm
Generation .....	Alternator, III Phase
System .....	12 V - DC
Battery .....	12 volt, 8 Ah VRLA
Head lamp .....	12 V, H4-60/55 W - BULB
Tail lamp/ Brake lamp..	12 V - 4/1 W LED

---

## TECHNICAL SPECIFICATIONS

---

Licence plate illuminator.....	12 V-LED
Front position lamp.....	12 V -LED
Speedometer lamp.....	12 V -LED
Hi beam indicator .....	12 V - LED
Neutral lamp telltale .....	12 V - LED
Turn signal telltale .....	12 V - LED
Turn signal.....	12 V, 10 W * 4 Nos.
Horn .....	12 V, 2.5 A
Starter motor .....	12 V, 0.7 kW
Instrument cluster .....	Digital cluster with LCD
Malfunction indicator.....	12 V - LED
ABS indicator.....	12 V - LED



### WARNING

---

Using bulbs/electrical gadgets other than specified rating will lead to overloading/erratic behaviour/premature failure of electrical system.

Modifications or fitments which are not approved by Royal Enfield, will seriously affect the performance of the vehicle and will render the warranty void.

---

## **TECHNICAL SPECIFICATIONS**

---

### **DIMENSIONS**

---

Length.....	2160 mm
Width .....	840 mm
Height .....	1165 mm
Wheel base .....	1455 mm
Ground clearance. ....	200 mm
Saddle height .....	795 mm

### **WEIGHTS**

---

Kerb weight (90% fuel & oil) .....	194 kg
Gross vehicle weight .....	375 kg

---

### **NOTE**

---

1. Values/Dimensions mentioned above are for reference only.
2. In view of continuous improvements being done on our motorcycles, the specifications are subject to change without prior notice.
3. Do not use the vehicle beyond the allowed gross weight. The suspension and tyres are designed to perform only to the maximum gross vehicle weight.

---

## RECOMMENDED LUBRICANTS

---

ENGINE OIL		FRONT FORK OIL		BRAKE FLUID	
Grade	SAE 15 W SO API SL Grade JASO MA 2 Semi synthetic	Grade	10 W/Fork oil (Viscosity range 35)	Grade	DOT 4
Capacity	Refill: 2.3 l (approx). Dry fill: 1.6 -1.8 l (approx). (During oil & filter element replacement in periodical maintenance).	Capacity	455 ml/leg	Capacity	Front/Rear:100 ml

---

### NOTE

Oil level should be up to "MAX" level. Do not overfill as it will affect the clutch functioning.

---

### CAUTION

Using non recommended/In-correct oils, can cause serious damage to the moving parts, affect performance of the motorcycle and void the warranty.

---

### NOTE

Recommendation subject to change without notice.

---

## **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 will result in injury to yourself or others and damages to the motorcycle.



---

### **WARNING**

---

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

---

### **CAUTION**

---

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

---

### **NOTE**

---

Indicates important and useful messages for clearer understanding.

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

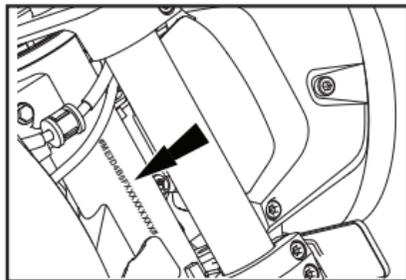
## MOTORCYCLE IDENTIFICATION NUMBERS -DETAILS

The VIN is a 17 digit number punched on the right side steering head tube and in the information plate rivetted to the frame down tube.

### Sample VIN :

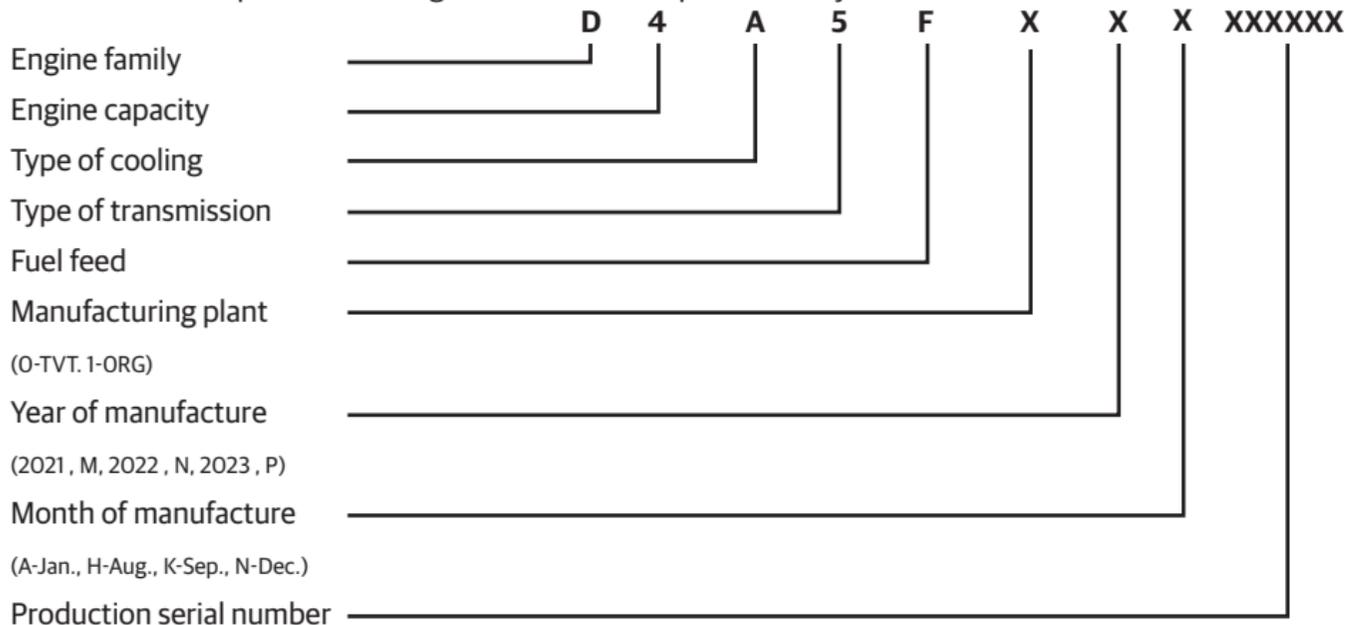
	ME3	D	4	B	5	F	X	X	X	XXXXXX
Manufacturer's code	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Engine Family Name	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Engine Capacity	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Model (Scram 411)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Transmission type	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Type of Fuel System	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Place of Manufacturing (1-Oragadam, 2-Vallam Vadagal)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Year of Manufacturing (L:2020 , M:2021 , N:2022)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Month Of Manufacturing (A-Jan., H-Aug., K-Sep., N-Dec.)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Production serial no.	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

### FRAME NUMBER

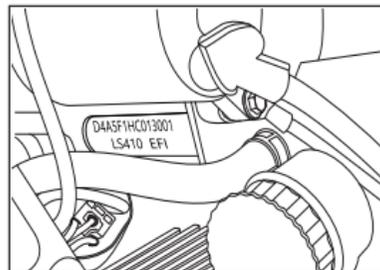


## MOTORCYCLE IDENTIFICATION NUMBER-DETAILS

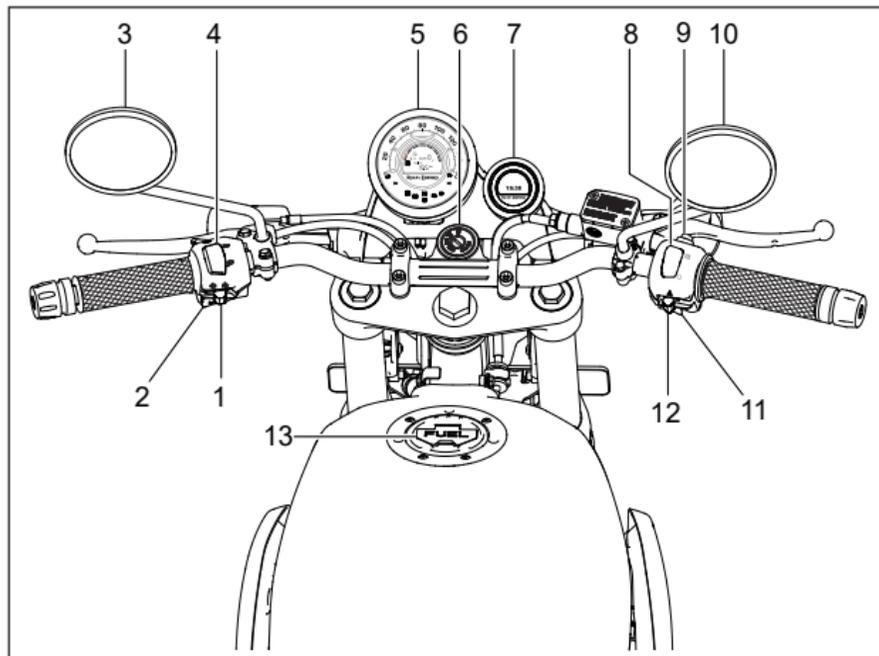
The engine number is punched on the left hand side crankcase. It is the means of identification of the engine and its production details. Please do not tamper with the engine number as it is prohibited by law.



### ENGINE NUMBER

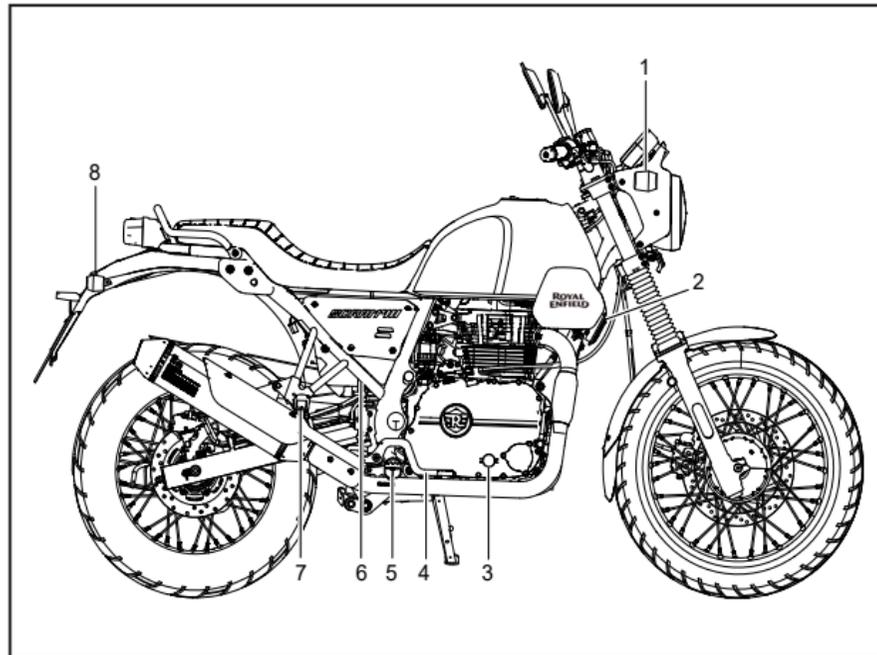


## LOCATION OF KEY PARTS



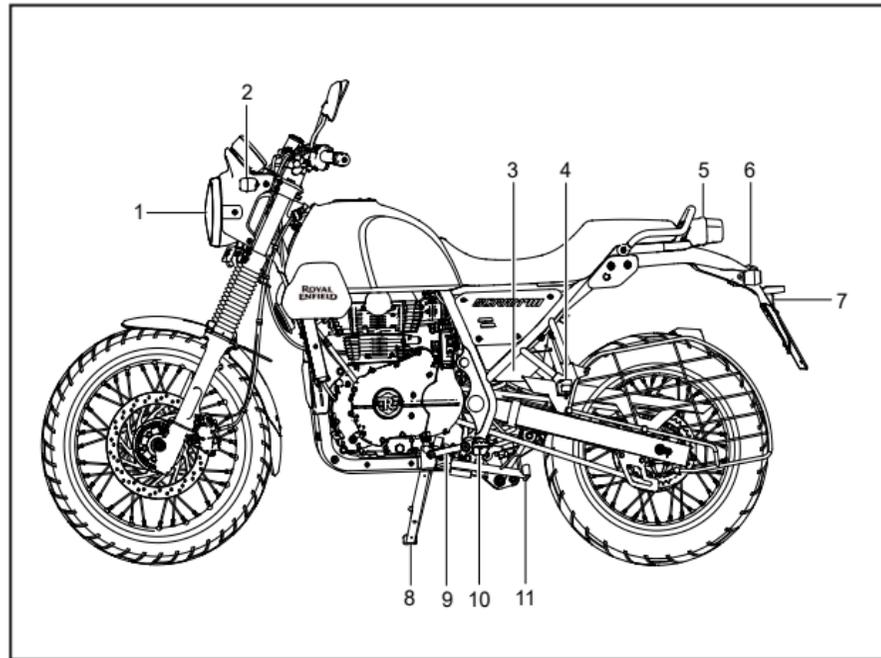
1. Turn signal switch
2. Horn button
3. Rear view mirror left side
4. Head lamp high beam/low beam switch
5. Instrument cluster
6. Ignition key
7. Tripper
8. Engine kill switch
9. Info button  
(Which is available in the RH switch module)
10. Rear view mirror right side
11. Electric start switch
12. Hazard switch
13. Fuel tank cap

## LOCATION OF KEY PARTS



1. Front trafficator right side
2. Horn
3. Oil level window
4. Rear brake pedal
5. Rider foot rest right side
6. ABS module
7. Pillion foot rest right side
8. Rear trafficator right side

## LOCATION OF KEY PARTS



1. Head lamp
2. Front trafficator left side
3. Canister
4. Pillion foot rest left side
5. Tail lamp
6. Rear trafficator left side
7. Licence plate illuminator
8. Center stand
9. Gear change lever
10. Rider foot rest left side
11. Side stand

---

## OPERATION OF CONTROLS

---

### STEERING LOCK

---

#### LOCKING:

1. Turn handle bar to extreme left or right position.
2. Switch "OFF" ignition gently depress key and turn anticlockwise further till steering is locked and remove key.



#### UNLOCKING:

1. Insert key, turn clockwise to ignition "OFF" position. If required, gently shake handle bar to help unlock steering easily.

### CAUTION

---

Do not force or attempt to lock/unlock steering if the handle bar is not in extreme left or right side. Failure to adhere to this caution will damage the lock and also cause the key to bend or break.



### WARNING

---

After unlocking steering and before starting engine check the handle bar free movement by turning to both left and right sides several times.

Failure to do so will cause unstable riding, leading to a potential accident, resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle.

---

## OPERATION OF CONTROLS

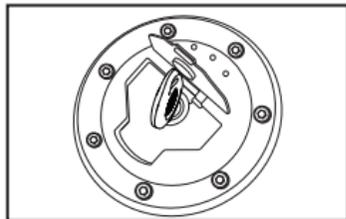
---

### FUEL TANK CAP

---

#### OPENING:

1. Lift flap and insert key.
2. Turn key clockwise to enable cap to unlock and spring up.



---

#### NOTE

---

Key cannot be removed when fuel tank cap is open.

#### CLOSING:

1. Gently depress cap till it is firmly locked in place and key can be removed.
2. Remove key and close flap.



#### WARNING

---

Do not overfill the fuel tank, stop filling when the fuel reaches bottom of anti-splash plate. Because fuel expands when it heats up, heat from engine or the sun can cause fuel spill out of fuel tank.

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

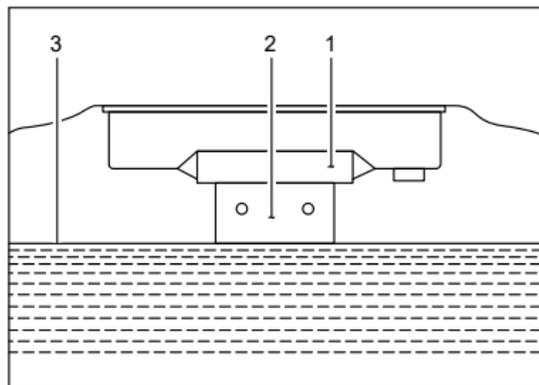
---

## OPERATION OF CONTROLS

---

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

### Anti splash plate

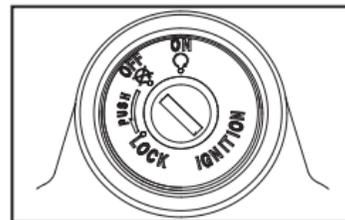


1. Fuel Filler Collar
2. Anti - Splash Plate
3. Maximum Fuel Level

---

### IGNITION SWITCH

---



---

### NOTE

---

1. Key can be removed only if ignition is in "OFF" or steering is locked.

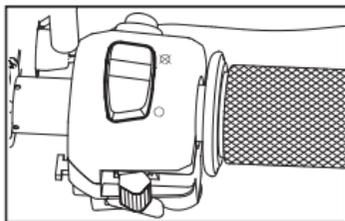
## OPERATION OF CONTROLS

### **WARNING**

Do not switch "OFF" ignition while riding the motorcycle. Doing so can cause a potential accident, resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle.

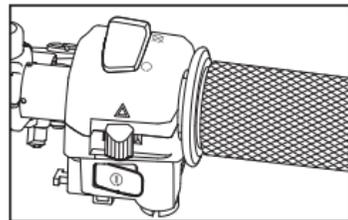
### **ENGINE STOP SWITCH**

-  Engine "OFF"
-  Engine "ON"



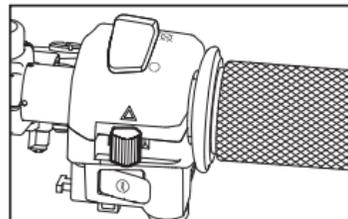
### **E-START SWITCH**

Depress and hold until engine starts for a maximum of 5 seconds.



### **HAZARD LIGHT SWITCH**

-  Hazard light "ON"
-  OFF



## OPERATION OF CONTROLS

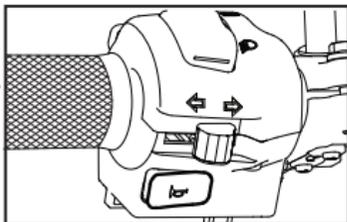
### **WARNING**

1. Turn signals do not work when the hazard light switch is on.
2. All the trafficator lamps will flash simultaneously.

### **HORN**

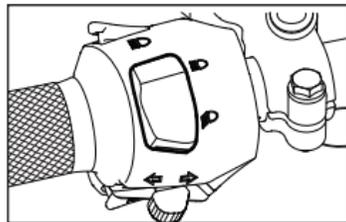
 Press

Press the horn button to sound horn.



### **DIMMER SWITCH**

When the headlamp is in "ON" condition High  /  Low beam will be selected by toggling the switch. High beam indicator tell tale located in instrument cluster will glow when high beam is selected.

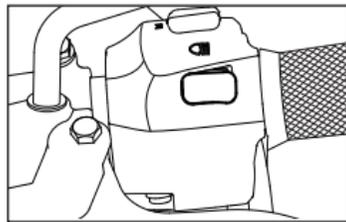


### **WARNING**

Use appropriate headlamp beam High/Low as per the traffic and road conditions for your safety and to avoid inconvenience to other riders.

### **DAY FLASH**

Press the switch to operate high beam filament in head light. It is giving indication to vehicle coming from opposite side while overtaking.



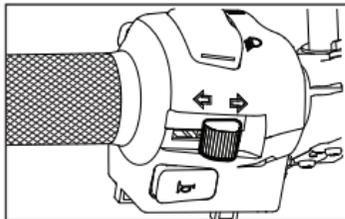
---

## OPERATION OF CONTROLS

---

### TURN SIGNAL SWITCH

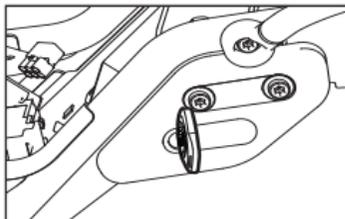
- ← Left turn signal "ON"
- ↑ "OFF" (Push to cancel)
- ⇒ Right turn signal "ON"



---

### SEAT

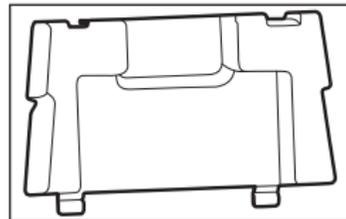
1. Locate key on left side & turn clock wise, lift the seat and remove.



---

### DOCUMENT HOLDER

1. Useful for storing motorcycle documents and owners manual.
2. Remove the seat.
3. Gently press on top to release the tabs from the frame and open slightly.
4. To completely remove, release the bottom tabs from the frame by pulling out gently.
5. When washing the motorcycle, be careful not to flood this area with water.



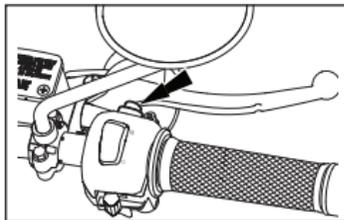
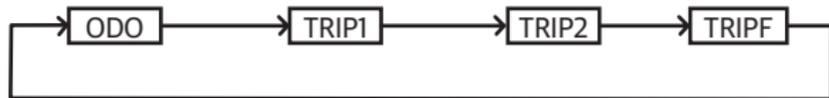
## OPERATION OF CONTROLS

### INFO BUTTON MANAGEMENT DETAILS

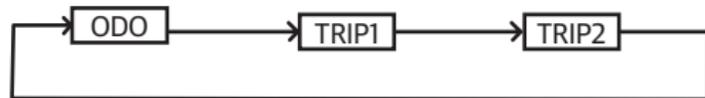
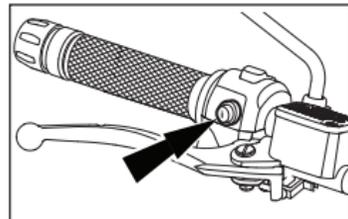
Press this button to select TRIP A/B, Clock settings and TRIP A/B reset in the Cluster..

A. LCD Sequence  
(Info switch press <1 sec.) :-

#### If Trip F enabled



#### If Trip F not enabled



### NOTE

- For trip re-set press info button for  $T > 3$  sec.

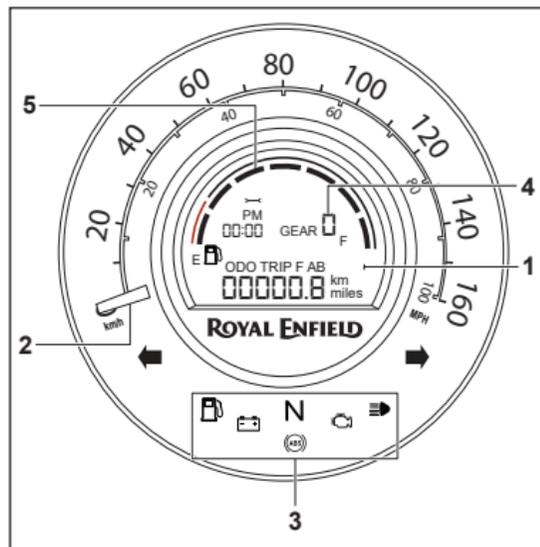
---

# OPERATION OF CONTROLS

---

## INSTRUMENT CLUSTER

---



1. Main LCD
2. Speedometer (km major)
3. Tell tales
4. Gear position indication
5. Fuel gauge

---

### **DISCLAIMER :**

---

Cluster unit display may look dull during sun overhead conditions this is normal and due to impact of direct sunlight on the unit customers to refer during other riding conditions.

## OPERATION OF CONTROLS

### MAIN LCD



1. Clock
2. Service reminder
3. Odometer
4. Trip value (A/B & F)

### CLOCK



1. Display in 12 hour format with AM/PM indication.
2. Will reset to 12:00 AM when battery is disconnected.

---

## OPERATION OF CONTROLS

---

### CLOCK SETTING

---

Function	Switch	Pressure time (s)	Action
Clock Setting Mode	INFO	T>3 sec	In ignition key "ON" and current display in ODO mode and no speed input (safety), press info button for specified time to enter into clock setting mode (hours will blink)
	INFO	0.2<T<1	Hours to increment
	INFO	T>3 sec	Enter into minutes mode (minutes to blink)
	INFO	0.2<T<1	Minutes to increment
	INFO	T>3 sec	Enter into unit mode (AM/PM) to blink
	INFO	0.2<T<1	Toggle between AM or PM
	INFO	T>3 sec	Save data and exit clock setting mode

---

#### NOTE:

In case no action is observed between clock setting function for more than 20 sec last shown value to be displayed.

## OPERATION OF CONTROLS

### SERVICE REMINDER

1. In case of service reminder symbol is "ON". Please plan for scheduled service at an authorised service center.
2. Service reminder can be reset only by authorised personnel at service centre after service is completed.
3. Service reminder symbol will flash on as per below distance input from odometer.
  - i) 1<sup>st</sup> service - 450 km
  - ii) 2<sup>nd</sup> service - 4,900 km
  - iii) From there on for every 5,000 km from previous value (ex: 9,900. 14,900 etc.)



### WARNING

Do not use high pressure water jet directly on instrument cluster for cleaning. Use only water spray cleaning and wipe it with soft dry cloth.

### ODOMETER

1. Displays the cumulative kilometers the vehicle has covered.



---

## OPERATION OF CONTROLS

---

Function	Switch	Pressure time (s)	Action
ODO	INFO	$0.2 < T < 1$	In ignition key "ON" ODO > Trip A
TRIP A	INFO	$0.2 < T < 1$	Trip A > trip B
	INFO	$T > 3 \text{ sec}$	Reset Trip A
TRIP B	INFO	$0.2 < T < 1$	Trip B > Trip F/ODO
	INFO	$T > 3 \text{ sec}$	Reset Trip B

---

## OPERATION OF CONTROLS

---

### TRIP "F" MODE

1. Distance driven after low fuel tell tale is "ON".
2. Cannot be re-set will be visible only when low fuel condition is sensed, will vanish if fuel is filled above low fuel condition.
3. Display can be toggled using info button during this condition but will auto appear after 25 sec linked with stand switch to avoid re-set when in side stand condition.
4. If ridden > 200 kms in Trip F condition "Low Fuel" will flash continuously on LCD. It is recommended not to ride vehicle in these condition as it will result in fuel pump damage.



### TRIP "F" Condition

1. Trip F will update only when kill switch is in "ON" condition.
2. After fuel filling above reserve level Trip F will continue to show for few min which is a normal behaviour, this is to avoid wrong indication.
3. Trip F reset will occur when riding in mid to rough roads condition due to frequent fuel oscillations this features to be used for reference purpose only and on smooth road surfaces.
4. Trip F will update only when side stand is removed.

---

### NOTE:

Fuel indication will vary on rough road, uphill and downhill conditions, for accurate indication refer during slow speed or flat surfaces.

## OPERATION OF CONTROLS

### TRIP A/B

1. Trip A/B indicates distance travelled in particular trip.



### WARNING

Never attempt to operate the info buttons while riding the motorcycle. Doing so will cause loss of concentration and unstable riding, leading to a potential accident resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle.

### GEAR POSITION INDICATION

1. Displays the gear position in which the vehicle is traveling.
2. When in neutral the indication will be "0".
3. When in gear the appropriate number between 1 to 5 will be displayed.



---

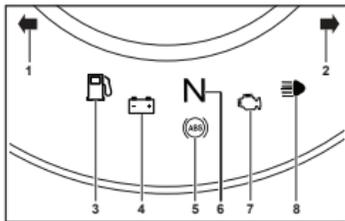
## OPERATION OF CONTROLS

---

### TELL TALES

---

1. Turn left: Left turn signal "ON".
2. Turn right : Right turn signal "ON".
3. Low fuel indication : Last segment blinking along with low fuel tell tale "ON" for low fuel condition.
4. Low battery indication : Indicator will glow continuously if ignition switch is "ON" & engine is not running. Indication will switch off as soon as engine is started. If battery voltage is below 12 V, indicator will glow continuously indicating a low battery.
5. ABS MIL : Will be continuously "ON" during initial check up (until or after vehicle running for a particular distance/ speed) and will turn "OFF" if system is ok, then will light up again in case of any ABS system malfunction.
6. Neutral : Transmission is in neutral.



7. EMS: Malfunction indication :
8. High beam indication: Head lamp high beam "ON".

---

### CAUTION

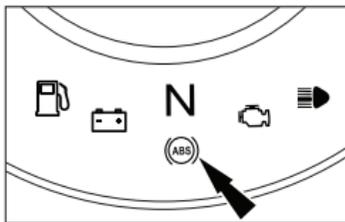
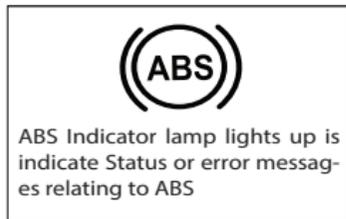
---

1. Do not run motorcycle incase the malfunction remains "ON" continuously as it can cause severe damage to the ECU & Sensors. Please visit the nearest authorised Royal Enfield dealer to diagnose & rectify the defect in the EMS.
2. Do not run motorcycle incase the ABS indicator lamp continuously "ON".

## OPERATION OF CONTROLS

### ABS INDICATOR LAMP

1. ABS indicator lamp continuously "ON" during initial check up (until or after vehicle running for a particular distance/speed) and will turn "OFF" if system is ok, then will light up again in case of any ABS system malfunction.



### FUEL GAUGE

1. Digital with 7 segment bar graph.
2. Last segment blinking along with low fuel tell tale "ON" for low fuel condition.



### WARNING

Do not use the motorcycle for long duration with the fuel indication in last segment blinking. Refuel at the earliest.

Failure to do so will cause the motorcycle to run out of fuel and get stranded in addition to causing serious damage to the fuel pump.

### CAUTION

Do not run motorcycle in case the ABS Indicator lamp continuously "ON".

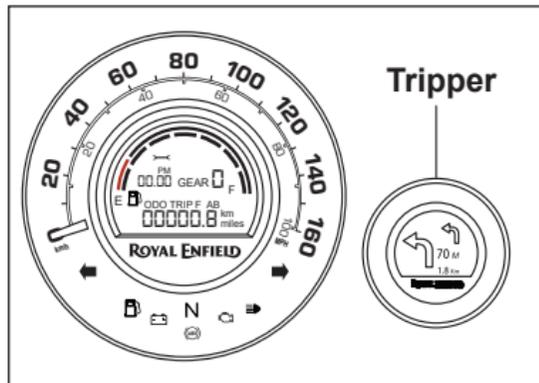
---

## OPERATION OF CONTROLS - TRIPPER

---

### TRIPPER

---



Trippler is being provided to have turn by turn navigation on motorcycle to help riders to have a hassle free riding without handling the smartphones, This device works based on bluetooth connectivity with navigation search based on RE Mobile app with the support of Google Maps.

Device is capable of showing turn by turn navigation on a custom designed round color TFT with uniquely designed arrow font designed intuitively for ease of riding.

Background display can be switched between day mode and night mode which can be selected by riders from RE Mobile app.

Scan the QR Code, to download, Install, register and to know more about the trippler.

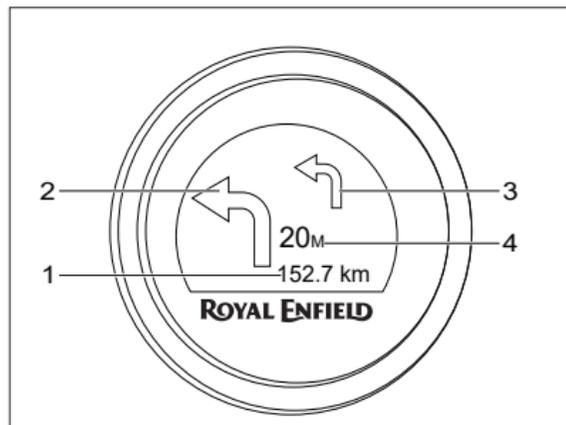


---

## OPERATION OF CONTROLS - TRIPPER

---

### Features:



1. Distance to destination or ETA
2. Primary direction or next turn
3. Secondary direction or next to next turn
4. Distance to next turn

1. Turn by turn navigation with primary turn, secondary turn.
2. Distance to next turn, distance to destination or Estimated Time of Arrival (ETA).
3. Clock display (in case of no connectivity, no navigation input or after destination is reached).
4. User can select day and night mode (through RE mobile app only).
5. Mobile phone low battery indication.

---

### DISCLAIMER

---

Tripper unit display may look dull during sun overhead conditions this is normal and due to impact of direct sunlight on the unit customers to refer during other riding conditions.

---

## **OPERATION OF CONTROLS - TRIPPER**

---

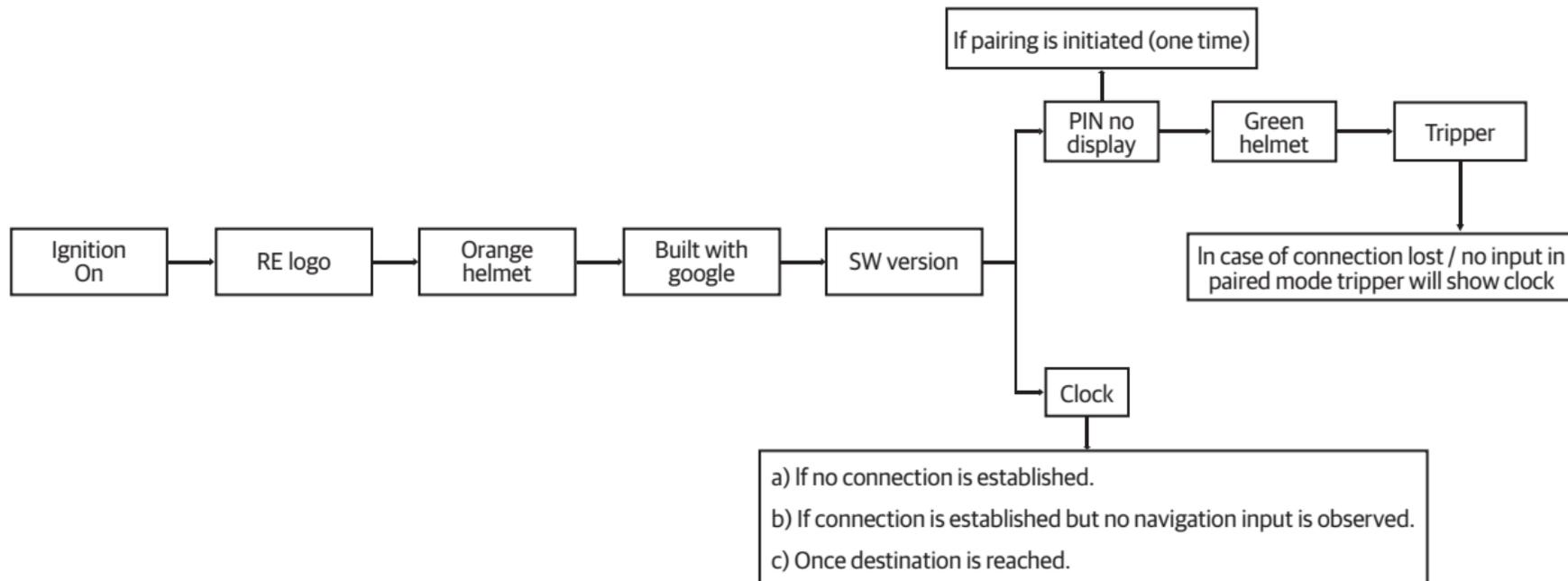
1. Primary direction or next turn: Indicates the next turn to be taken along with the distance.
2. Distance to next turn: Shows the distance to next turn.
3. Secondary direction or next to next turn: Indicates the next turn to be taken after the primary direction, will be shown only when primary turn is less than 100 m if there is no turn the display will be blank in this region.
4. Distance to destination or ETA: Shows the total distance to destination or Estimated Time of Arrival (based on user selection from RE Mobile app).

### **Smartphones compatible version to use RE Mobile app:**

1. Compatible with Android and iOS.
2. Android support: Current version - 2.
3. iOS support: Current version -1.
4. Connectivity control only through RE Mobile app.

# OPERATION OF CONTROLS - TRIPPER

## TRIPPER - DISPLAY FLOW SEQUENCE



---

## OPERATION OF CONTROIS-TRIPPER

---

### NOTE

---

1. After every ignition "ON" cycle tripper will be in discoverable mode for 120 sec.
2. Incase there is no connection established within 120 sec display will enter into clock mode to re-initiate connection ignition "OFF-ON" cycle to be repeated.
3. During navigation mode if there is no input from smartphone for 5 sec bluetooth connection will be terminated to avoid power draw and will display clock.
4. Bluetooth connection can be terminated by end user also by closing the mobile application.
5. For first time pairing user needs to enter the secured pin shown on tripper through RE Mobile app to setup the device, after that auto-pairing will happen if same device is connected.
6. Everytime the tripper is paired the clock time will sync with mobile time after which it will continue to run with internal clock even in case of disconnection, there will be time difference between time shown on instrument cluster and tripper - customer needs to update cluster clock inline with time shown on tripper as and when required as mentioned in push button management of cluster.
7. Do not apply or use gasoline/petrol related fluids for cleaning or wiping on instrument cluster or tripper as it will result in permanent damage to the same.

---

## OPERATION OF CONTROLS-TRIPPER

---

### CAUTION

---

1. Ensure ignition is "ON" and display is in powered while establishing connection.
2. Ensure first time pairing is done in isolated environment to avoid cross connections (one time).
3. Day and night mode is user selectable only, will not change over automatically to be selected during night driving to avoid rider distraction.
4. Bluetooth connection can be established only through RE Mobile app.
5. Ensure bluetooth and location settings are turned always "ON" before usage.
6. Disable battery optimisation settings/low battery cutoff setting of smartphone for navigation to work in low battery mode.
7. RE Mobile app works only with android (Current version -2) and iOS (Current Version -1) versions, for other lower versions performance lag can be expected.
8. Tripper bluetooth version is V4.2.
9. Tripper time display may have a mismatch with actual time displayed in mobile device once the bluetooth connectivity is lost.
10. RE Mobile app works with bluetooth version 4.2 and N+ 1.0, for other lower versions performance lag can be expected.
11. Check for network signal strength in case of navigation lag.
12. Check for data speed in case of navigation lag, navigation system performance is better in 4G band compared to other lower versions.
13. Calibrate mobile phones frequently for more gps accuracy & location accuracy is dependent on.

---

## PRE - OPERATIONAL CHECKS

---

1. Ensure adequate fuel in fuel tank for the journey planned.
2. Tyres inflated to correct pressure.
3. No side wall cracks cuts or abrasions in the front and rear tyres.
4. Rear chain for proper tension and sufficiently lubricated.
5. Engine oil level.
6. Control cables inner not damaged, frayed or broken. Clutch and accelerator controls working smoothly.
7. Front and rear brake efficiency and free play in front and rear brake levers.
8. Hydraulic oil level correct in both front and rear master cylinders.
9. Free movement of handle bar to left and right sides.
10. All electrical controls horn working correctly head lamp, tail lamps, brake lamps and indicator lamps working correctly.
11. Front and rear wheel axle nuts tightened properly to torque.
12. Front and rear wheel spokes ensure fixed firmly.
13. No loose or broken spokes.
14. All fasteners are tight to required torque.
15. Engine idling correctly and smooth.
16. No abnormal noise/ any leak from engine.



### **WARNING**

---

For your personal welfare and safety, these preoperational checks should be performed periodically. Failure to do so will affect safe operation, damage your motorcycle and lead to accident causing serious injury.

---

## SAFE & HAPPY RIDING

---

1. Please read this manual carefully to get to know the motorcycle and its maintenance schedules.
2. Please exercise utmost caution while refueling. Open the lid carefully and slowly. Refuel only in a well ventilated area with the ignition switched "OFF".
3. Gasoline is highly explosive and inflammable. Do not smoke or refuel if there are any naked flames or sparks nearby. Switch "OFF" mobile phones and other hand held electronic devices.
4. Know and respect the rules of the road. Please be a safe rider for your own safety and for other road users.
5. Please ride your motorcycle defensively. Remember a motorcycle does not afford the same protection as an automobile.
6. Ride only at moderate speeds and out of traffic until you have become familiar with the handling characteristics of your motorcycle under all conditions.
7. Do not exceed the legal speed limit. Always reduce speed when poor driving conditions exist. Use extra caution when approaching and passing through intersections since intersections are the most likely places where accidents happen.
8. Ride where other motorists can easily spot you. Please do not ride in another motorist's "blind spot".
9. Always signal well in advance before turning or changing lanes. Make sure that other motorists can see your signaling and slow down.
10. Never ride under the influence of alcohol or other drugs that might affect your riding skills reflex.
11. When riding with pillion rider, it is your responsibility to instruct them on proper riding procedures and riding gear.
12. If you are a new rider we recommend that you obtain formal training on correct motorcycle riding techniques. New riders should gain experience under various conditions while driving at moderate speeds. Pay strict attention to road surfaces and wind conditions.
13. Do not allow other individuals, under any circumstances, to operate your motorcycle unless you know they are experienced, licensed riders and are thoroughly familiar with the operating conditions of your motorcycle.

---

## **SAFE & HAPPY RIDING**

---

### **RIDING GEAR**

---

1. Motorcycle riding pants and jacket fitted with certified armour.
2. Motorcycle riding boots.
3. Motorcycle riding gloves.
4. ISI, DOT or SNELL certified helmet as applicable for rider and pillion.
5. Never wear loose-fitting clothes; otherwise they could catch on the control levers, footrests or wheels and cause injury or an accident.
6. Always wear protective clothing that covers your legs, ankles and feet. The engine or exhaust system become very hot during or after operation and can cause burns.

### **CAUTION**

---

Avoid any contact with the exhaust system. The exhaust system gets very hot and remains hot for a long time after parking the motorcycle. Wear clothing that will completely cover the legs while riding. Failure to do so will result in serious burn injuries.

---

## SAFE & HAPPY RIDING

---

### SITTING POSTURE

---

Correct sitting posture is a must for stable and safe riding.

1. Sit with your shoulders completely relaxed.
  2. Do not lock your elbows and retain them at a slight bend to enable maneuvering.
  3. Hold the handle grip close to its inner end.
  4. Lightly grip the fuel tank with your knees.
  5. Keep your toes in "straight ahead" direction.
  6. Before turning, look extensively in the rear view mirror, without turning your head.
- 

### BRAKING

---

1. Apply front and rear brakes gently and simultaneously for maximum braking efficiency.
2. Please use utmost caution while applying brakes, especially while riding under wet or bad road conditions.



### WARNING

---

The hydraulic disc brakes fitted on your motorcycle requires very less effort. Applying any one of the brakes suddenly will lock the wheels. Failure to adhere to this warning will cause loss of control of the motorcycle, leading to a potential accident, resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle.



### WARNING

---

Brake pad wear will be increased if the motorcycle is used frequently off-road. Always inspect the brake pads more frequently if the motorcycle is used off-road & replace the brake pads before they become worn to or beyond the minimum service thickness. Riding the worn brake pads will reduce braking efficiency, leading to loss of motorcycle control and an accident.

Do not place the foot on the brake pedal while riding unless braking is required. Because this will lead to premature wear of brake pad.

---

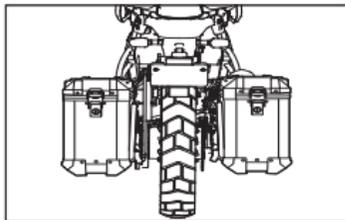
## CARGO & ACCESSORIES

---

### LOADING

---

1. Please do not fit non original equipment or non genuine accessories as they will cause damage to the motorcycle and also affect the riding and handling of the motorcycle.



1. Please do not fit non original equipments or non genuine accessories as they will cause damage to the motorcycle and also affect the riding and handling of the motorcycle.
2. Please ensure cargo is securely strapped to the rear and sides of the motorcycle and do not become loose or shift while riding.
3. Ensure the weight is distributed evenly on both sides of the motorcycle.
4. Do not carry excessively heavy or huge cargo on the motorcycle.

5. The maximum permissible weight of the pannier box is 5 kg each side.
6. Do not hang any items on the handle bar and luggage carrier while riding which will lead to damage for the parts nearby.



### WARNING

---

Please exercise utmost caution while carrying cargo or luggage on the motorcycle. Failure to adhere to the above precautions can cause loss of control on the motorcycle leading to a potential accident, resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle. Total weight of the rider and any passenger accessories and luggage must not exceed the maximum load limit.

Exhaust gases contains poisonous carbon monoxide and chemicals, known to cause cancer, birth defects or other reproductive defects. Please park the motorcycle only in a well ventilated area and do not stay in the same place where the motorcycle is parked.

---

## CARGO & ACCESSORIES

---

 **WARNING**

---

Do not tow a disabled motorcycle. The steering and handling of the motorcycle will be impaired due to the force of the towline. Towing a motorcycle can cause loss of control on the motorcycle, leading to a potential accident resulting in serious injury to both rider and other road users besides causing severe damage to the motorcycle.

 **WARNING**

---

Do not attach a trailer to the motorcycle attaching a trailer can cause loss of control on the motorcycle, leading to a potential accident, resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle.

 **WARNING**

---

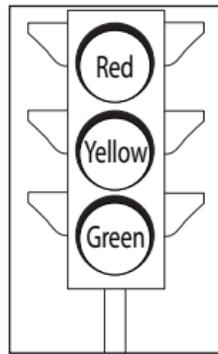
Max load on grab rail not to exceed 7 kg.

---

## RULES OF THE ROAD

---

1. Be sure your number plate is installed in the position specified by law and is clearly visible at all times.
2. 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
  - WetWatch for loose debris, such as leaves, slippery substances or loose gravel that can hamper the stability of your vehicle.
3. 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.
4. Keep to the correct side of the road center line when meeting oncoming vehicle.
5. All traffic signs including manual controls at intersections, should be obeyed promptly slow down at traffic signs near schools and caution signs at rail road crossings.
6. When intending to turn signal at least 100 ft (30.5 m) before reaching the turning. Be close to the center line (unless local rules require other-wise), slow down and then turn carefully.
7. 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.
8. Do not leave the curb or parking area without signaling. Be sure your way is clear to enter moving traffic. A moving line of traffic always has the right-of-way.



---

## RULES OF THE ROAD

---

9. When parking the motorcycle, park on a firm and flat surface to prevent it from falling over.
10. Protect your motorcycle against theft. After parking your motorcycle, ensure that the steering head is locked and then remove the ignition key.

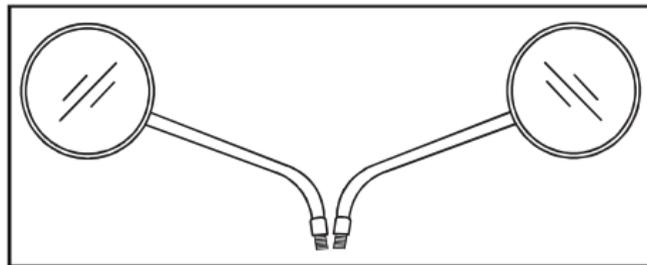
---

### SIDE VIEW MIRRORS

---

Your motorcycle is equipped with convex mirrors and have a curved surface. This type of mirror is designed to give a much wider view of the rear than a normal flat mirror. However, vehicles 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 vehicles/objects seen in these mirrors.



---

### NOTE

---

To establish the relative distance of vehicles/objects behind your motorcycle through the mirrors, 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 with reference to your riding posture.

---

## RUNNING IN PERIOD

---

The Scram 411 Motorcycle is capable of consistent high speeds. However as with any new motorcycle a "Running-in period" procedure is essential to help in proper "Bedding-In" of the various moving parts in your motorcycle and to achieve optimum performance subsequently.

1. During the first 2,000 km of run, do not exceed the speed limits as shown in the table below.
2. Do not exceed maximum specified payload.
3. Warm up the engine for a few minutes at idling speed to allow engine oil to lubricate all the moving parts in the engine before riding the motorcycle.
4. Avoid full throttle operation and do not ride at constant throttle continuously. Vary the speed by 10% while riding.
5. Avoid sudden accelerations and racing starts.
6. Avoid prolonged full-throttle operation. Vary speed occasionally.

<b>Gear</b> \ <b>Motorcycle Speed</b>	<b>First 500 kms (kmph)</b>	<b>501 - 2,000 kms (kmph)</b>
1	15 kmph	20 kmph
2	25 kmph	30 kmph
3	30 kmph	40 kmph
4	45 kmph	55 kmph
5	60 kmph	80 kmph

---

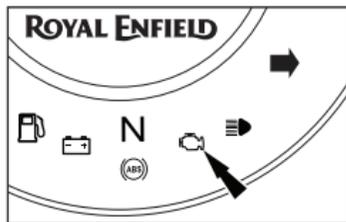
## WARNING INDICATIONS & SAFETY SYSTEMS

---

### 1. ENGINE MALFUNCTION INDICATOR LAMP

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

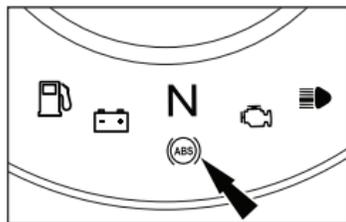
In the event of any malfunction in the EFI System the MIL will glow continuously. It is recommended to take the motorcycle to a nearest Royal Enfield Authorized service station for a detailed inspection and correction of the EFI system.



### 2. Anti-Lock Braking System (ABS)

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

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



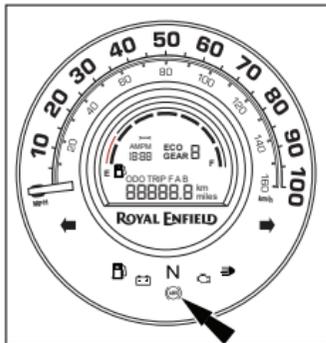
---

## WARNING INDICATIONS & SAFETY SYSTEMS

---

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

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



---

### 3. Roll Over Sensor

---

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

1. Ensure the motorcycle is made upright and is on its center stand.
2. Ensure gears are in correct neutral and the neutral lamp is glowing in the instrument console.
3. Switch "OFF" both ignition & stop switches, wait for a few seconds and switch "ON" the ignition and stop switch again, to start the engine.

---

## **WARNING INDICATIONS & SAFETY SYSTEMS**

---

### **CAUTION (ABS)**

---

1. ABS is a safety feature to help prevent locking of wheels during sudden application of brakes. It is by no means a substitute for good riding practices and anticipatory braking.
2. Please ride carefully and apply brakes cautiously especially while cornering. ABS cannot estimate the "weight shifts" and momentum of the motorcycle while negotiating a corner and therefore prevent skidding due to loss of traction.
3. Please anticipate the stopping distance required for the speed of travel and apply brakes well in advance so as to bring the motorcycle to a safe stop.
4. Please apply both brakes to stop- front brake momentarily earlier followed by rear brake. To have better traction and control of the motorcycle.
5. Always ensure that you ride well within the legal speed limits.
6. Failure to adhere to the above can cause an accident resulting in serious injuries and loss of life.
7. The control function causes a slight pulsing of the hand and foot brake levers.

---

## WARNING INDICATIONS & SAFETY SYSTEMS

---

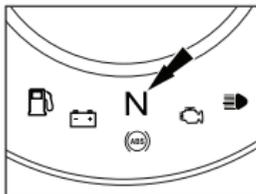
### DO'S & DON'TS : (ABS)

---

DO'S	DON'TS
■ While starting the engine do check the ABS indicator comes "ON" and switches "OFF" when the vehicle speed exceeds 5 kmph (3.1 mph).	■ Do not release the brake lever/pedal when pulsations are felt during hard application of the brakes in an emergency situation. The pulsations only indicate that the ABS is activated.
■ Please check the brake fluid at "MAX" level in the front and rear brake master cylinders and there is no leak in the brakes systems.	
■ Apply both the brakes simultaneously for better efficiency while braking.	■ Do not apply only the front or rear brakes it can lead to inefficient braking.
■ In the event of the ABS indicator remaining continuously "ON" please take the motorcycle to a nearest authorized Royal Enfield service station to inspect the brakes system control of the vehicle.	

## STARTING

Ensure gear is in neutral position and the neutral Indicator " N " is glowing in the instrument cluster. To shift into neutral, move the motorcycle back and forth gently, while simultaneously shifting the gear.

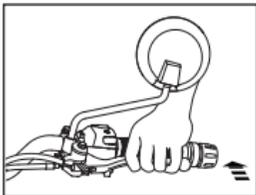


### CAUTION

Do not attempt to shift gears when engine is "OFF" and rear wheel is stationary as it will cause damage to gear shift mechanism. Please move motorcycle back and forth while simultaneously shifting gears.

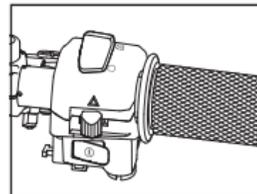


1. Switch "ON" ignition and the kill switch to "RUN" position.
2. Depress clutch lever fully.
3. Press starter button and hold till engine starts.



### CAUTION

In case engine does not start, do not keep starter button pressed continuously as it will drain the battery. Release button and restart after a few minutes to allow battery to recoup.



### CAUTION

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

### NOTE

1. It is recommended to switch off the engine when the engine is in idling condition for long time.
2. It is recommended not to accelerate by giving excessive throttle for more than 5 min when the engine is in idle condition, which will cause damage to the engine internal parts and exhaust system as well.

---

## GEAR SHIFTING, RIDING & STOPPING

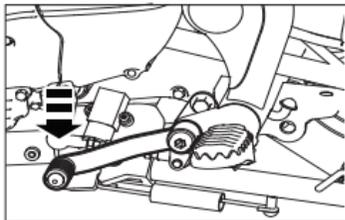
---

1. Warm up engine for 2 min - until idling is consistent.

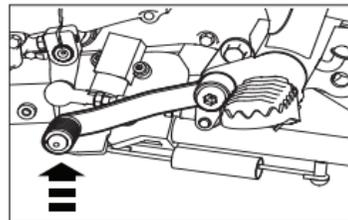
### GEAR SHIFT PATTERN

1-N-2-3-4-5

2. Press clutch lever towards the hand grip.
3. Press gear pedal with toe to engage 1<sup>st</sup> gear.
4. Gently open throttle and release clutch simultaneously. If clutch is released suddenly, the engine will stall and cause a jerky start.



5. Lift gear lever with toe to engage 2<sup>nd</sup> and subsequent gears.



---

### NOTE

---

1. Always start the engine with gear in neutral position.
2. Always move the motorcycle in 1<sup>st</sup> gear position only.

---

### CAUTION

---

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

---

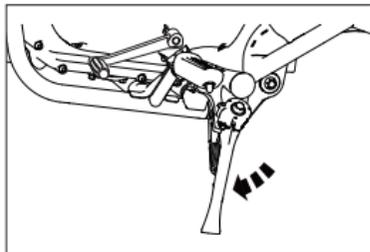
## PARKING

---

### PARKING MOTORCYCLE ON SIDE STAND

---

1. Select a firm, flat surface. When side stand is in "ON" position.
2. Extend side stand. Tilt the motorcycle to the left, till it is supported firmly.



---

### CAUTION

---

When side stand is in "ON" position.

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

---

### WARNING

---

1. Ensure side stand is retracted fully before riding the motorcycle.
2. Please exercise extreme care while parking and ensure it is parked firmly to avoid the motorcycle from falling over and causing injury to you or to others and damage to the motorcycle parts.
3. Do not ride motorcycle with the side stand extended. Doing so can cause the side stand to touch the ground while cornering and result in instability & loss of control on the motorcycle leading to a potential accident result in serious injury to both sides and other road users besides causing severe damage to the motorcycle.

---

### NOTE

---

The side stand is only designed for the weight of the motorcycle. Do not sit on the motorcycle when it is resting on the side stand. The side stand or frame will become damaged and the motorcycle will fall over.

---

## **ENVIRONMENT CARE**

---

### **BE AN ENVIRONMENTALLY CONSCIOUS RIDER**

---

Swachh Bharat is Sachh Bharat. Being a Royal Enfield rider help the nation and the future generation for a cleaner environment.

Engine oil, oil filter, petrol, battery (batteries shall be disposed only with an authorised service centre or battery recycler), tyres, tubes, electrical & electronic parts replaced on your vehicle are to be disposed off in a proper way without polluting the environment. When your vehicle is attended in a Royal Enfield workshop our dealers do take care of that aspect. If you are getting it attended elsewhere please ensure that items are segregated and kept in a suitable container or bag without allowing them to get into soil, water or sewerage line, drains, water bodies like lake, canal, river, sea etc. We strongly recommend that they are disposed off, in accordance to the applicable law, through Pollution Control Board approved agencies in the locality.

Please ensure that the effluents are not discharged into the environment. Please promote dry washing which helps the nation to conserve water too.

---

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

---

## BE AN ENVIRONMENTALLY CONSCIOUS RIDER

---

### AFTER WASHING

---

1. Ensure, the motorcycle is thoroughly dry by wiping with a clean soft lint free absorbent cloth or chamois leather.
2. Remove all adhesive tapes.
3. Lubricate control cables, pivots for footrest, side stand, center stand, brake and gear shifter linkages, drive chain etc. with lube oil.
4. Polish the painted and plated surfaces using recommended automobile polishing wax.
5. Start the engine and allow to run at an idling speed for a few minutes to warm up engine.
6. Drive the motorcycle slowly, apply both the brakes intermittently to dry up the water in brake pads.
7. Please clean/wipe out water spills completely inside the RH side panel before keeping tool kit, first aid kit and other relevant documents inside the right side panel.
8. Use lukewarm water and mild detergent on the painted components to remove dirt, etc.
9. Clean motorcycle thoroughly with plain water to remove the detergent.
10. Never spray water towards bottom side of instrument cluster directly to avoid water entry through breather holes.
11. If possible, use compressed air and blow off water particles from the obscure areas of the motorcycle, electrical connections etc.
12. Once the motorcycle has been ridden in salty conditions (i.e. during winter in places where road salt is used) or near coastal areas it is recommended to wash your motorcycle with cold water after the ride to prevent corrosion or rust build-up. Please do not use warm water for washing as it will damage the motorcycle due to chemical reaction with the salt. After washing process once the motorcycle is completely dry it is recommended to apply anti corrosion spray on all the metal and chrome plated areas to protect the parts from corrosion.

---

## **BE AN ENVIRONMENTALLY CONSCIOUS RIDER**

---

13. It is recommended not to apply the anti-corrosion spray on the brake discs.
14. Do not use petrol or other flammable liquids to clean or wash on electronics parts.
15. The parts chosen using motorcycle configurator should not be washed with soap or chemical, use only with plain water.
4. Wash the motorcycle only when the engine is in cold condition.
5. Do not remove side panel while washing to avoid water entry.
6. Brush engine area with a recommend non corrosive solvent to remove dirt or grease.
7. Use low pressure water jet to clean.
8. Never spray water with great force on head lamp, meter/ cluster unit, flasher lights, front and rear wheel hubs, electrical connections and wires, control cables, EFI components, spark plug, battery, side panels.

---

### **PRECAUTIONS**

---

1. Remove ignition key and seal the ignition key barrel slot using adhesive tape.
2. Please remove tool kit, first aid kit and other relevant documents if any inside the right side panel before proceeding for washing of the motorcycle.
3. Cover the silencer tail pipe, horn and control switches with suitable plastic bags and tie it firmly to prevent water entry.
9. Do not use high pressure washers or steam jet cleaners near the seal of headstock bearing or steering stem bearing, seal of wheel bearing, brake calipers, air intakes & exhaust outlets.
10. Do not apply any corrosive solvent on painted surfaces or rubber parts.

## PERIODICAL MAINTENANCE

The periodical maintenance schedule detailed below is based upon average riding conditions and indicates the intervals at which regular inspections, adjustments, replacements and lubrications must be carried out to help maintain your Scram 411 motorcycle meticulously. If in case the motorcycle is used frequently in very dusty environment/ severe climatic conditions/ poor roads/ stagnant water etc., the maintenance will need to be done earlier as will be required.

Contact a nearest Royal Enfield Authorised Dealer/ Service Centre to carry out the periodical maintenance and for any expert advice.

Sl. No.	DESCRIPTION	FREE SERVICE				PAID SERVICE						
		whichever is earlier				20	25	30	35	40	45	50
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
1	Engine oil (level check/ replace)	R	I	R	I	R	I	R	I	R	I	R
		Check level at every 1,000 km or earlier as required										
2	Engine oil filter element	R		R		R		R		R		R
3	Engine oil strainer on crankcase LH	C		C		C		C		C		C
4	Inlet/ Exhaust tappet setting	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A
5	Rubber hose, inlet manifold	I	I	I	I	I	I	I	I	R	I	I

## PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	FREE SERVICE				PAID SERVICE						
		whichever is earlier										
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
6	Oil cooler inlet & outlet pipes	I	I	I	I	I	I	I	I	I	I	I
7	Spark plug	C&A	C&A	C&A	R	C&A	C&A	R	C&A	C&A	R	C&A
8	HT leads for crack	I	I	I	I	I	I	I	I	I	I	I
9	Fuel hose & clip	I	I	I	I	I	I	I	I	R	I	I
10	Fuel pump (under tank) mounting	Check for screw tightness in all services										
11	Air filter element	C	C	R	C	R	C	R	C	R	C	R
		Clean/ Replace more frequently if motorcycle always used in dusty/ off Road conditions.										
12	Accelerator cable	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A	I&A

## PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	FREE SERVICE whichever is earlier				PAID SERVICE						
		0.5	5	10	15	20	25	30	35	40	45	50
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
13	Rubber hose, Air filter to throttle body	I	I	I	I	I	I	I	I	I	I	I
14	PAV pipes & hose clip	I	I	I	I	I	I	I	I	R	I	I
15	Evaporative emission equipment rubber hoses	I	I	I	I	I	I	I	I	R	I	I
16	Throttle body	Throttle body should be removed from the vehicle and cleaned with a dry microfibre cloth. Usage of throttle body cleaners or any similar solvent or alcohol based liquids for cleaning is strictly prohibited. Throttle body cleaning every 10,000 km /12 months or earlier as required.										
17	Clutch cable	I&A	I&A	I&A	I&A	I/A/R	I/A/R	I/A/R	I/A/R	I/A/R	I/A/R	I/A/R

## PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	FREE SERVICE				PAID SERVICE						
		whichever is earlier										
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
18	Clutch free play	Adjust every 1,000 km or earlier as required										
19	Clutch no slippage	I	I	I	I	I	I	I	I	I	I	I
20	Steering head bearings#	I & A	Inspect, adjust & lubricate for every 5000 km or earlier as required. Replace if necessary									
21	Front fork oil	I	I	I	I	R	I	I	I	R	I	I
22	Rear wheel drive chain#	I & A	Clean, Lubricate & adjust every 1000 km or earlier as required									
23	Battery terminals (apply petroleum jelly)	C	C	C	C	C	C	C	C	C	C	C
24	Earth wire eyelet tightness			I		I		I		I		I
25	Hydraulic brake fluid - front & rear#	I	I	I	I	R	I	I	I	R	I	I

## PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	FREE SERVICE				PAID SERVICE						
		whichever is earlier				20	25	30	35	40	45	50
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
26	Hydraulic brake hose & washers - front& rear#											
27	Brake pads - front & rear#											
28	Tyre wear pattern (front & rear)# (1)											
29	Spokes tightness/wheel rim run out front & rear#											
30	Front & Rear wheel bearings for play#						I&R					I&R
31	Swingarm pivot bearings#		Inspect & If required lubricate for every 5,000 km or earlier as required. Replace if necessary									

## PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	FREE SERVICE				PAID SERVICE						
		whichever is earlier				20	25	30	35	40	45	50
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
32	Rear suspension linkages#	I	Inspect & If required lubricate for every 5,000 km or earlier as required. Replace if necessary									
33	Rear brake pedal pivot	L	L	L	L	L	L	L	L	L	L	L
34	Rear brake pedal free play	Adjust every 1,000 km or earlier as required										
35	Rear wheel cush rubbers#	I	I	I	I	I	I	I	I	I	I	I
36	All mounting fasteners in vehicle for tightness#	I&T	I&T	I&T	I&T	I&T	I&T	I&T	I&T	I&T	I&T	I&T
37	Hand levers, center stand, side stand, rider & pillion foot rest pivots & gear shift levers #	Lubricate every 1,000 km or earlier as required										
38	Cam chain / chain pads / auto chain tensioner	I	I	I	I	I	I	I	I	I	I	I&R

## PERIODICAL MAINTENANCE

Sl. No.	DESCRIPTION	FREE SERVICE				PAID SERVICE						
		whichever is earlier										
	km(x 1,000)	0.5	5	10	15	20	25	30	35	40	45	50
	Months	1.5	6	12	18	24	30	36	42	48	54	60
39	Starter motor & starter relay connections	I	I	I	I	I	I	I	I	I	I	I
40	Side stand switch operation	I	I	I	I	I	I	I	I	I	I	I
41	Fuel pump (under tank) mounting	Check for screw tightness in all services										

A: Adjust

C: Clean

I: Inspect (Clean, Adjust, Lubricate or Replace if necessary)

T: Re-tighten (2)

L: Lubricate

R: Replace

# Service more frequently when ridden in unusually wet or dusty areas.

# Service more frequently when riding in rain or at full throttle.

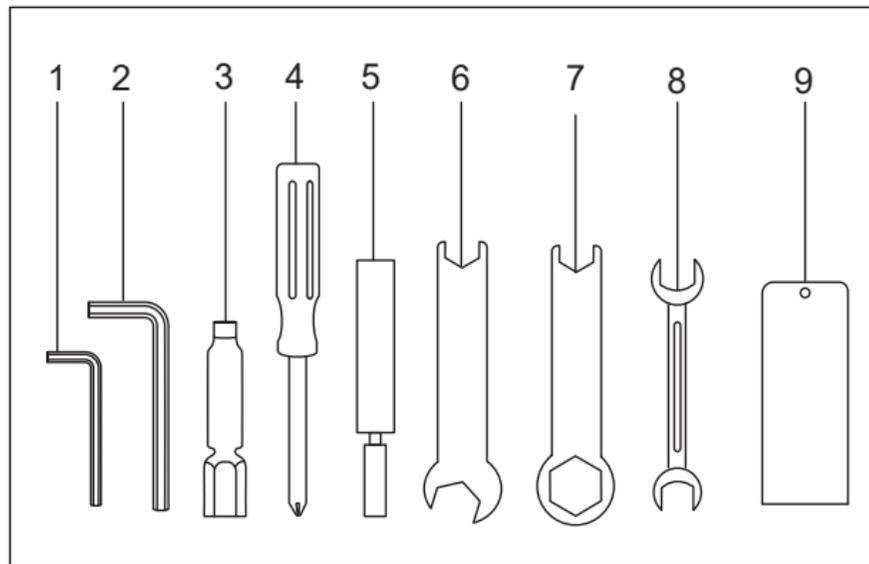
#(1) Tyre to be replaced if the tyre wear identification mark reached (2) To be done at authorised Royal Enfield Dealer/ Service Center.

For maintenance after 50,000 km. please repeat same frequency specified above. in consultation with a Royal Enfield Authorised Dealer/ Service Centre.

## TOOLS KIT

The tools kit is strapped underneath the seat.

S.No.	Tool Description	Purpose	Qty
1	Allen key 4mm	To remove side panels LH & RH	1
2	Allen key 6mm	To loosen / tighten pinch bolt on fork end	1
3	Tool spark plug	To loosen / tighten spark plug	1
4	Screw driver	To loosen / tighten screws of housing	1
5	Extension tube	Additional leverage for loosening tightening wheel axle nuts	1
6	Combination spanner open end 17 • 13 mm	To loosen/ tighten hex nuts	1
7	Combination Ring spanner 24 • 14 mm	To loosen / tighten wheel mm axle nuts	1
8	D.E. spanner 10 • 12 mm	To loosen/ tighten hex nuts	1
9	Tool wallet	For storing tools	1



---

## **FIRST AID KIT**

---

A first aid kit is provided with the motorcycle for any emergency requirements. Please inspect the kit regularly and replace materials upon expiry.

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

---

## MINOR MAINTENANCE TIPS

---

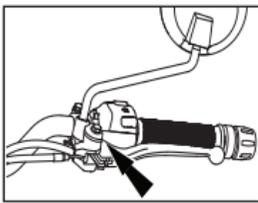
The following simple maintenance activities will help in maintaining your motorcycle. However if you are in experienced or feel it is best done by an experienced person, we recommend you to get in touch with a Royal Enfield Authorised Dealer/ Service Centre.

---

### HAND LEVER PIVOTS

---

Wipe the area free of dirt/grease. Apply a few drops of oil on the pivots.

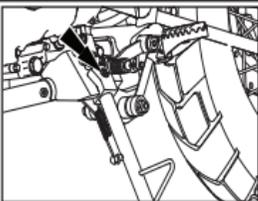


---

### SIDE STAND PIVOTS

---

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

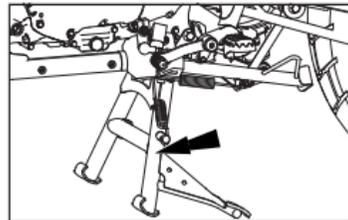


---

### CENTER STAND PIVOTS

---

Lubricate the center stand pivot periodically for smoother operation of center stand.

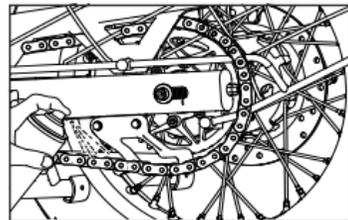


---

### DRIVE CHAIN

---

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



---

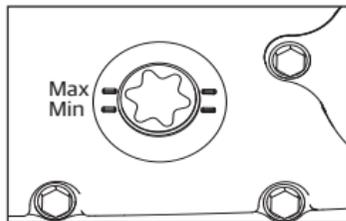
## MINOR MAINTENANCE TIPS

---

### OIL LEVEL INSPECTION

---

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



---

### CAUTION

---

Using non-recommended/in-correct oils, can cause serious damage to the moving parts, affect performance of the motorcycle and void the warranty.

---

### SPARK PLUG

---

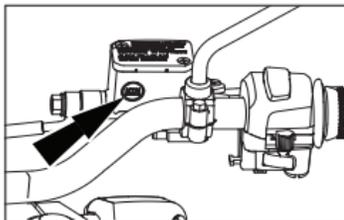
#### CLEANING AND ADJUSTING PLUG GAP

1. Remove the spark plug cap from the spark plug.
2. Remove spark plug using the plug spanner and tommy bar.
3. Clean the insulator tip and electrodes of the plug carefully.
4. Replace the spark plug every 15,000 km.
5. Refit the spark plug on the cylinder head.
6. Refit the spark plug cap on the spark plug.
7. Make sure the spark plug, spark plug cap and HT cable are proper fitment.

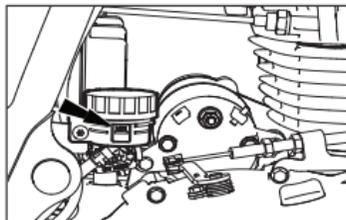
## MINOR MAINTENANCE TIPS

### BRAKE FLUID

1. Check fluid level is between "MIN & MAX".
2. Top up with dot 4, if required.
3. Do not overfill.
4. Do not mix dot 4 with other brake fluids.



FRONT BRAKE



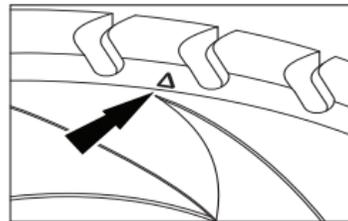
REAR BRAKE

### CAUTION

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

### INSPECTION OF TYRES AND RIMS

1. Periodically inspect:
  - Rims for spokes breakage wheel rim and run-out.
  - Tyres for proper seating of the beading on the rims.
2. Check and remove stone, splinters, nails or other sharp particles embedded in the tyre.
3. Replace tyres if
  - Side wall cracks, cuts or damages, uneven lugs wear etc.
  - Tyre lugs work out upto the "wear indicator" symbol on the side wall.
4. Use only recommended tyres & tubes, inflated to correct air pressure.



	Front	Rear
Solo	1.75 kg/cm <sup>2</sup> (25 psi)	2.25 kg/cm <sup>2</sup> (32 psi)
With Pillion	1.89 kg/cm <sup>2</sup> (27 psi)	2.39 kg/cm <sup>2</sup> (34 psi)

## MINOR MAINTENANCE TIPS

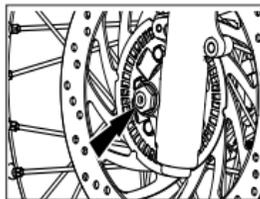
### **WARNING**

Dismantling and reassembly of the wheel should be done only by an experienced technician.

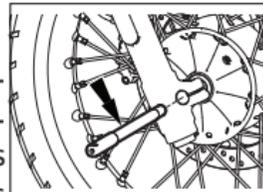
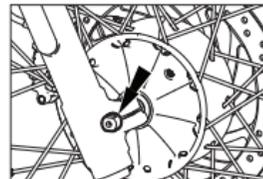
Failure to do so will cause loss of control on the motorcycle leading to a potential accident, resulting in serious injury to both rider and other road users, besides causing severe damage to the motorcycle.

### **FRONT WHEEL REMOVAL**

1. Support front end of engine suitably such that the front wheel is off the ground.
2. Loosen pinch bolt on right fork end with 6 mm allen key.



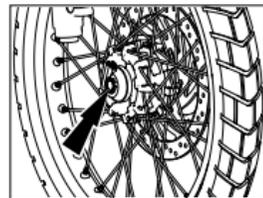
3. Hold spindle on right side and remove spindle nut and washer from left side.
4. Support wheel and pull out spindle from right side.
5. Remove the wheel along with RH side collar & disc side spacer.



### **CAUTION**

Do not press the brake lever when wheel is removed as this will result in the brake pads coming out too far from the brake caliper.

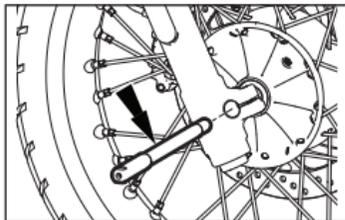
1. Place a suitable spacer of 4 mm thickness, between the brake pads to avoid accidental compression of the brake lever.



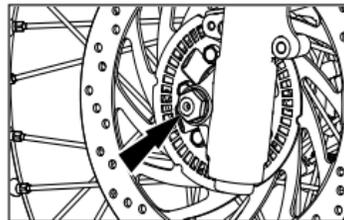
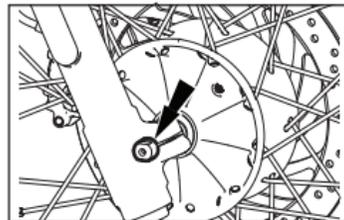
## MINOR MAINTENANCE TIPS

### FRONT WHEEL REASSEMBLY

1. Remove the spacer placed between the brake pads.
2. Position the wheel along with RH side collar & disc side spacer on left side between the front fork legs, ensuring the brake disc is located between the brake pads.
3. Insert wheel spindle from right fork end.
4. Ensure the position of RH side collar & disc side spacer aligned properly.
5. Hold spindle on right side, locate washer and nut on spindle on left side and tighten firmly.



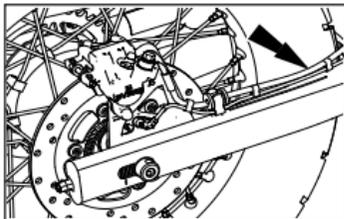
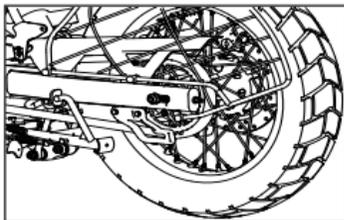
6. Tighten pinch bolt on right fork end.
7. Rotate wheel and check for smooth rotation.
8. Press brake lever and check front brake for efficiency.



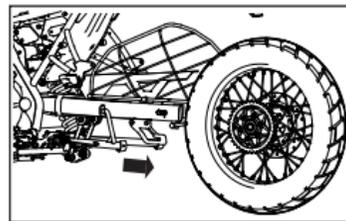
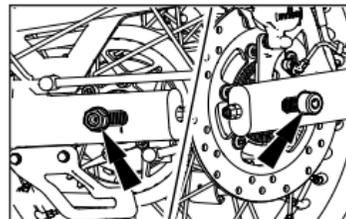
## MINOR MAINTENANCE TIPS

### REAR WHEEL REMOVAL

1. Ensure the motorcycle is on a firm, flat surface and the rear wheel is off the ground.
2. Gently remove the brake hose along with its rubber grommets from the locating clips on the swing arm.
3. Loosen rear axle nut on the right side and remove along with washer.
4. Pull out the wheel axle from the left side, taking care not to drop the wheel spacers.



5. Remove the brake caliper assembly from the slot in the swing arm along with ABS wheel speed sensor and support it suitably to avoid damage to the brake hose and ABS wheel speed sensor.
6. Slide out the rear wheel from the swing arm, taking care not to drop the spacers on the wheel hub .



### CAUTION

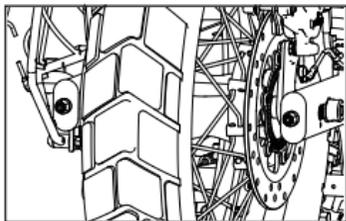
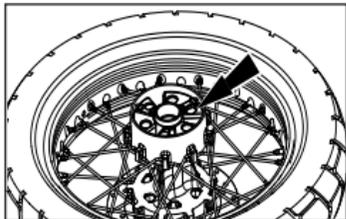
Do not press the brake lever when wheel is removed as this will result in the brake pads coming out too far from the brake caliper.

1. Place a suitable spacer of 4 mm thickness, between the brake pads to avoid accidental compression of the brake lever.

## MINOR MAINTENANCE TIPS

### REAR WHEEL REASSEMBLY

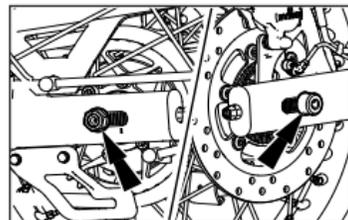
1. Ensure the cush rubbers are in place in the wheel hub.
2. Insert the wheel assembly between the swing arms and position the cush rubbers on the rear sprocket lugs correctly.
3. Remove the spacer between the brake pads and locate the caliper such that the brake disc is between the brake pads.
4. Locate the caliper bracket slot on the lug in the swingarm.
5. Position the respective spacers on the left and right side of the wheel hub.
6. Ensure the axle mounting hole in the swing arm, wheel hub and caliper bracket are aligned.



7. Insert the wheel axle from the left side of the swing arm and gently tap it in.

### CAUTION

1. Do not force the spindle through as it will cause damage to the threaded end.
2. Ensure correct chain tension and rear wheel alignment with front wheel by adjusting the adjusters on both left and right side of swing arm.
3. Assemble washer and wheel axle nut on right side and tighten to correct torque.
4. Fix the brake hose pipe in swing arm clips properly.



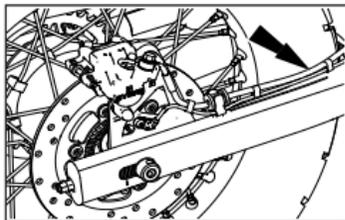
---

## MINOR MAINTENANCE TIPS

---

### CAUTION

1. Please ensure the brake hose is correctly positioned on the clips, without any twist, sharp kinks or damage as it will seriously affect the performance of the rear brake.
2. Check rear brake for effectiveness and correct functioning before using the motorcycle.



---

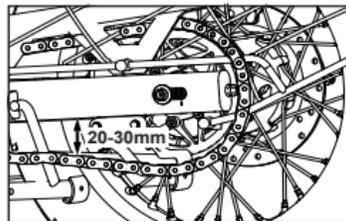
### DRIVE CHAIN TENSION (FREE PLAY 20-30 mm)

---

1. Measure the drive chain free play on the top run of the chain.
2. The recommended free play is 20 to 30 mm.

To adjust the chain tension and free play.

3. Loosen rear wheel spindle nut.
4. Loosen lock nuts of the chain adjuster on both ends of the swing arm.
5. Tighten/loosen the adjuster nut on left swing arm end, to reduce/increase chain tension.
6. Ensure the ground is level & firm and place the motorcycle in its center stand.
7. Rotate wheel slowly and check chain free play at the top run to be between 20- 30 mm.



---

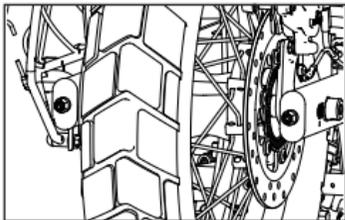
## MINOR MAINTENANCE TIPS

---

### **WARNING**

Please follow instructions as per periodical maintenance.

1. Tighten/loosen adjuster nut on right side to align the front and rear wheels and also to align the reference marks on both left and right side of the swing arm.
2. Tighten the lock nuts against the adjuster nuts, taking care not to disturb the adjuster nut settings.
3. Tighten rear wheel spindle nut to a specified torque.



### **WARNING**

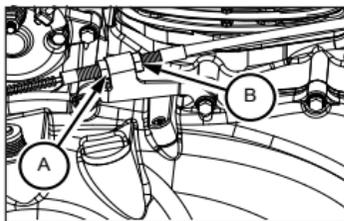
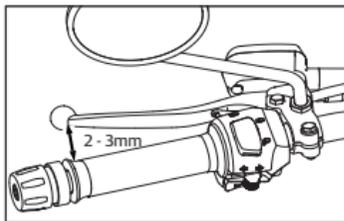
1. Chain slackness beyond 30 mm will lead to chain slippage.
2. Maintain drive chain slackness within the specified limits at every 10,00 km interval.
3. Please check the front and rear wheels are correctly aligned, after the chain adjustment.
4. If the engine/rear sprocket are worn, replace the engine/rear sprocket & rear chain as a kit.

## MINOR MAINTENANCE TIPS

### ADJUSTMENTS - CLUTCH LEVER FREE PLAY

Clutch Lever (free play 2 - 3 mm)

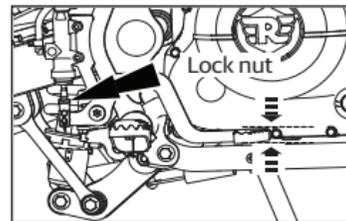
1. Loosen the cable outer lock nut(A).
2. Turn the nut (B) clockwise to reduce the play or anticlockwise to increase the free play.
3. Check free play 2 to 3 mm at clutch lever pivot on handle bar end.
4. Tighten lock nut (A) after adjustment is done.



### ADJUSTMENTS - REAR BREAK PEDAL FREE PLAY

Rear brake pedal free play 7 to 11 mm.

1. Loosen the lock nut in master cylinder push rod assembly.
2. Rotate the master cylinder push rod anti clockwise to reduce the rear brake pedal free play.
3. Rotate the master cylinder push rod clockwise to increase the rear brake pedal free play.
4. After adjustment tighten the lock nut in master cylinder push rod assembly.



---

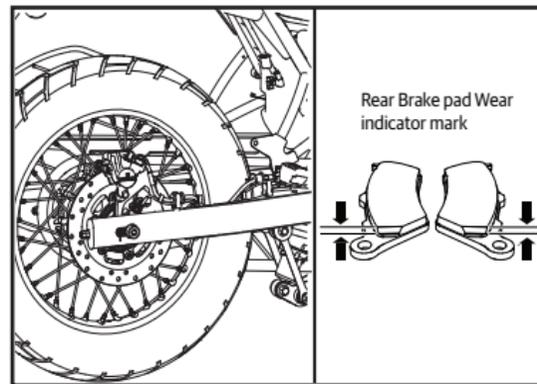
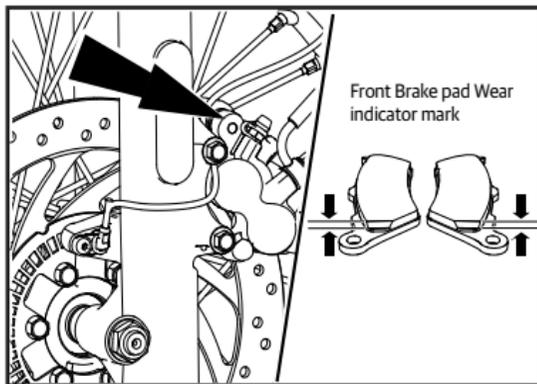
## MINOR MAINTENANCE TIPS

---

### BRAKE PAD WEAR

---

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

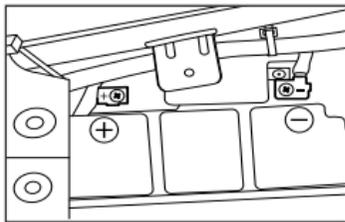


Check the wear indicator mark on each pad. If either pad is worn to the wear indicator mark. Replace both pads as set. Visit royal enfield dealer for this service.

## MINOR MAINTENANCE TIPS

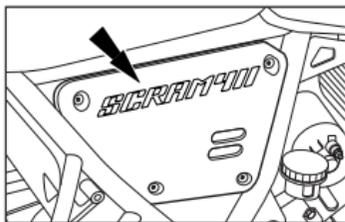
### BATTERY & MAINTENANCE

1. The motorcycle is provided with 12 V - 8Ah MF battery.
2. The battery must be periodically checked for corrosion free terminals.

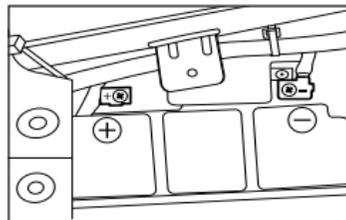
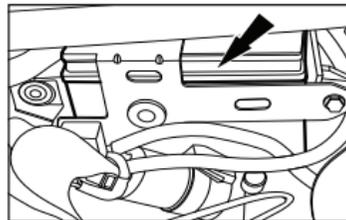
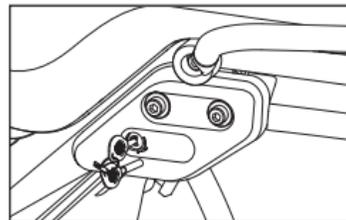


### REMOVAL OF BATTERY FROM THE MOTORCYCLE

1. Ensure motorcycle is parked on its center stand, in a well ventilated area.
2. Ensure the ignition switch and engine stop switch are in "OFF" position.
3. Remove the side panel on the right side by unscrewing the hex socket button head screws.



4. Unlock( turn the key clockwise) and remove the seat.
5. Disconnect the harness connectors around the battery located area.
6. Remove the battery carrier bracket by loosening the hex bolt.
7. Disconnect both the battery terminals wires( negative first and positive next respectively).
8. Take out the battery.



---

## MINOR MAINTENANCE TIPS

---

### **WARNING**

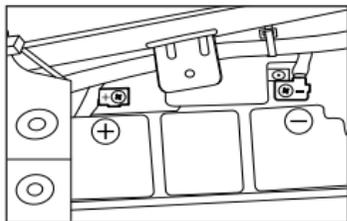
Always disconnect the black negative (-) battery cable first and then the red positive (+) cable while removing the battery connections.

---

### REASSEMBLY OF BATTERY ON MOTORCYCLE

---

1. Position the battery in the battery carrier such that the terminals are facing inside.
2. Ensure ignition switch is in "OFF" condition.
3. Connect the red wire to the positive terminal of the battery first.
4. Next, connect the black wire to the negative terminal of the battery.
5. Smear the terminals with petroleum jelly. (Do not use grease in the battery terminals).



6. Place the terminal boot/cap properly.
7. Refit the battery bracket.
8. Reconnect the harness connector to the respective couplers on the battery located area.
9. Refit the right side panel.
10. Reassemble the seat.

---

### NOTE

---

1. Clean the wire terminals free of corrosion and keep the terminals coated with petroleum jelly.
2. It is not necessary to check the battery electrolyte level or add distilled water as the battery is a maintenance free (Sealed type).
3. Your battery is a maintenance free type and can be permanently damaged if the cap strip is removed.

---

## MINOR MAINTENANCE TIPS

---

### CAUTION

Keep the +ve and -ve cables firmly connected to the respective battery terminals. Failure to do so will result in damage to the motorcycle electrical system.

### WARNING

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

### WARNING

Battery terminals and internals contain lead and lead components, known to cause cancer and birth defects or other reproductive harm. Always wear approved protective face shield, rubberized gloves and protective clothing when working with batteries. Keep batteries and acid out of reach of children.

### NOTE

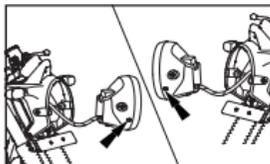
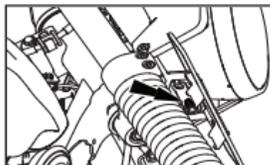
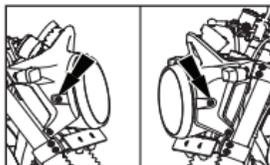
Usage of frequency for motorcycle is very important for battery to be in good performance condition. If the motorcycle is being used very rarely or sparingly and the terminals are not disconnected the battery is bound to lose its charge and result in a dead battery.

## MINOR MAINTENANCE TIPS

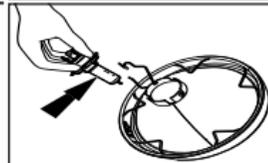
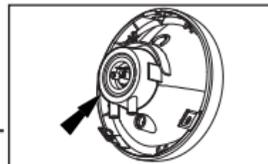
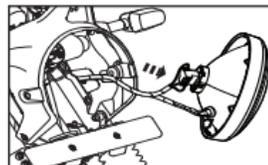
### CHANGING ELECTRICAL COMPONENTS

### HEADLAMP BULB DISMANTLING

1. Gently loosen the headlamp mounting bolt both sides from headlamp cowl.
2. Gently loosen the third mounting screw in the bottom of the housing and take out the headlamp.
3. Remove the 2 screws holding the head lamp rim to the housing.
4. Gently pullout the headlamp rim along with reflector assembly.



5. Disconnect head lamp coupler.
6. Remove the protective rubber cap over the bulb.
7. Gently press the bulb holding clip and release it from the slot in the reflector.
8. Remove the bulb from the reflector.



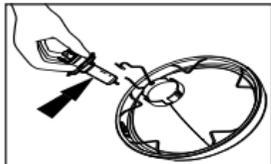
### NOTE

1. Never touch the bulb with your fingers. Finger prints will etch the glass and decrease bulb life.
2. Always hold the bulb with clean dry cloth during handling.
3. Do not disturb the vent cap provided in the inner body mould.

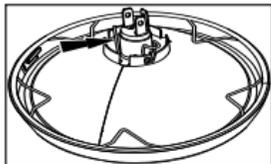
## MINOR MAINTENANCE TIPS

### HEADLAMP BULB REPLACEMENT

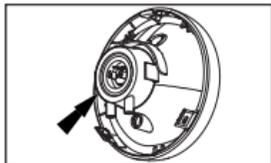
1. Locate the 3 lugs in the bulb correctly in the reflector.



2. Locate the bulb holding clip over the bulb and lock it in the slot in the reflector.

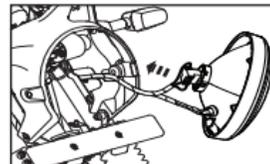


3. Put the protective rubber cap over the bulb correctly such that the vent pipe is facing downwards.

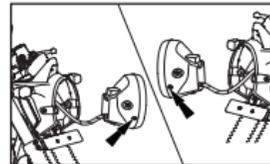


4. Connect head lamp coupler on the bulb terminals correctly.

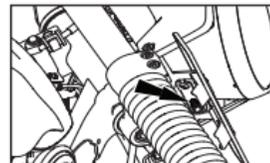
5. Locate the headlamp rim in the housing correctly such that it locks in place



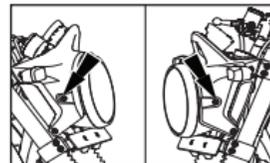
6. The two mounting holes in the rim are aligned with the holes in the housing



7. Assemble the 2 screws and tighten firmly.



8. Refit the headlamp assembly and ensure the third mounting hole in the bottom of the housing is aligned with the bracket slot.



---

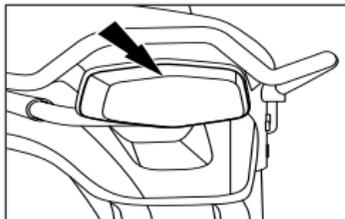
## MINOR MAINTENANCE TIPS

---

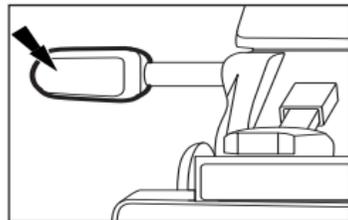
### TAIL LAMP & LICENSE PLATE ILLUMINATOR

---

1. The tail lamp & license plate illuminator has a LED lighting system. In the event of failure, the entire tail lamp & license plate illuminator assembly should be replaced.
2. Contact an Authorised Royal Enfield Dealer/Service Centre to replace the same.



4. Position the new bulb inside the holder, ensuring that the pins in the bulb, match with slots in the holder.
5. Push the bulb and turn clockwise direction to lock the bulb in the holder.
6. Refit the trafficator cover with reflector and tighten the screw.



---

### NOTE

---

Do not over tighten the screw. Make sure the Ignition switch is in "OFF" position when replacing the bulbs, fuses and electrical parts.

---

### TRAFFICATOR BULB REPLACEMENT

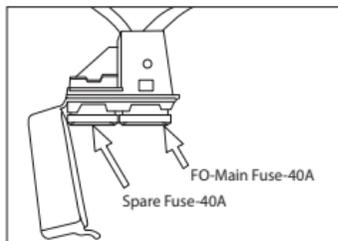
---

1. Remove the screw from the trafficator housing back side.
2. Remove outer lens.
3. Remove the fused bulb by pushing and turning in anticlockwise direction.

## MINOR MAINTENANCE TIPS

### RELAY STARTER- FUSE BOX

1. Remove the RH side panel.
2. Replace the required fuse with the spare fuse available in the fuse carrier.
3. The blade fuses are located in the carrier.

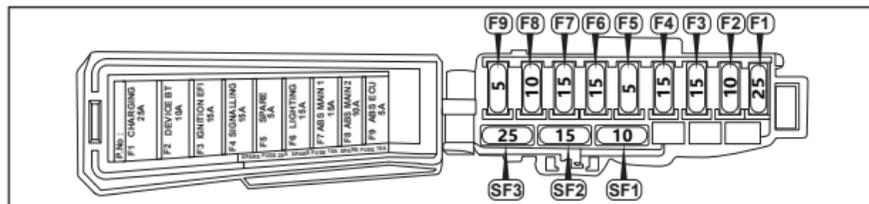


### NOTE

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

### FUSE & CARRIER

1. The fuse carrier is located under the rider seat.
2. Remove the seat.
3. Open the fuse carrier lid & replace fuse as indicated inside the lid.
4. Replace the required fuse with the spare fuse available in the fuse carrier.



### NOTE

F2	Device Bt + Fuse	10 A	EMS ECU. Instrument Cluster. Tripper.
F3	Ignition Fuse (EFI)	15 A	Relay Coil. EMS ECU. Ignition Coil. Fuel pump. Injector. O2 Sensor. E purge and Diagnostic tool.
F4	Signalling Fuse	15 A	Instrument Cluster. Tripper. Gear Position Sensor. Flasher. Brake Switch and Horn.
F6	Lighting Fuse	15 A	Headlamp Low & High Beam. Front Position Lamp. Rear Position Lamp & License Plate Illuminator.

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

---

## MINOR MAINTENANCE TIPS

---

### BLADE FUSE USAGE LIST

---

ID No.	Color	Rating	Function
F1	WHT	25 A	CHARGING FUSE
F2	RED	10 A	DEVICE Bt+ FUSE
F3	BLU	15 A	IGNITION FUSE (EFI)
F4	BLU	15 A	SIGNALLING FUSE
F5	YEL	5 A	SPARE FUSE
F6	BLU	15 A	LIGHTING FUSE

ID No.	Color	Rating	Function
F7	BLU	15 A	ABS MAIN 1
F8	RED	10 A	ABS MAIN 2
F9	YEL	5 A	ABS IGNITION
SF1	RED	10 A	SPARE FUSE
SF2	BLU	15 A	SPARE FUSE
SF3	WHT	25 A	SPARE FUSE

### WARNING

Please get the electrical system of your Motorcycle checked thoroughly and get the faults corrected immediately after experiencing any fuse failure. Not doing this can result into repeated fuse failures. Usage of fuses other than specified rating will damage the complete electrical system. Any attempt to jumper a defective fuse gives rise to the risk of a short-circuit and fire. Always replace a defective fuse with a new fuse of the same rating.

---

## **LONG TRIP PRECAUTIONS**

---

### **CHECKS PRIOR TO THE COMMENCEMENT OF LONG JOURNEY**

---

1. Service the motorcycle at a Royal Enfield Authorised Dealer/Service centre.
2. Ensure sufficient quantity of petrol in the fuel tank for the journey planned.
3. Check and correct tyre pressure if necessary.

### **CHECKS AFTER EVERY 1500 km OF RUN**

---

1. Any loose fasteners.
2. Condition of the tyres.
3. Correct oil level in engine.
4. Working of all lights and horn.
5. Proper drive chain tension.

### **ITEMS TO BE CARRIED**

---

1. Tool kit.
2. Bulbs for headlight, trafficator light, fuse.
3. Accelerator, clutch cables.
4. Rear chain master link lock assembly.
5. Insulation tape.
6. Spark plug, spark plug cap.

---

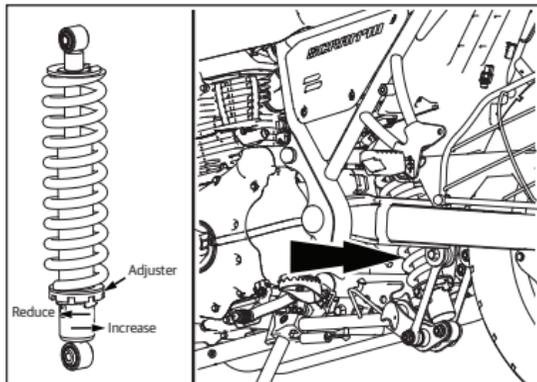
# SHOCK ABSORBER

---

---

## SPRING PRELOAD & SHOCK ABSORBER SETTINGS

---



---

## INCREASING THE PRELOAD

---

To increase spring preload, turn preload adjuster in the clockwise direction.

---

## REDUCING THE PRELOAD

---

To decrease the spring preload, turn preload adjuster in the anti-clockwise direction.

---

## CAUTION

---

It is recommended to visit Authorised Dealer for adjusting spring preload and shock absorber settings.

---

## **OFF ROADING**

---

### **AFTER OFF ROADING**

---

It is recommended to check the following after off roading:

#### **TYRE PRESSURE**

1. Tyre pressure needs to be optimal for effective riding on surfaced roads.
2. Always check the tyre pressures are correct.

#### **BRAKES**

1. Riding on dirty & muddy roads brakes will not be effective immediately because of dirt & moisture on the disc pads.
2. Apply the brakes in good time until the brakes have been cleaned.

#### **RIMS**

1. It is recommended to check the rims & wheels for damage after off roading.

### **SPRING PRELOAD & SHOCK ABSORBER SETTINGS**

---

1. The off road settings of spring & shock absorber settings will impair the motorcycle's handling characteristics on surfaced roads.
2. Remember to correct the spring & shock absorber settings before returning to surfaced roads.

### **AIR FILTER ELEMENT**

---

1. Cleaning of air filter element is recommended for effective utilisation of air filter element in returning to surfaced roads.
2. Check for any damages or clog in air filter and replace if required.

---

## WASHING PROCEDURE

---

### PRECAUTIONS

---

1. Wash motorcycle when the engine is cold.
2. Cover the silencer, tail pipe, horn, control switches, instrument cluster & tripper with suitable plastic bags and tie it firmly to prevent water entry.
3. Remove ignition key and seal key hole using adhesive tape.
4. Brush engine area with a solvent to remove dirt or grease.
5. Use low pressure jet of water to clean.
6. Do not spray water directly on the steering stem area as it will damage the bearings and cause the handle bar movement to become sticky.
7. Never spray water with great force on head lamp, speedometer, flasher lights, front and rear wheel hubs, electrical connections and wires, control cables, cables, sparkplug, battery, ABS ECU, EMS ECU, side mirrors, steering stem etc.
8. Do not apply any corrosive solvent on painted surfaces or rubber parts.
9. Use luke warm water and mild detergent on the painted components to remove dirt, etc.
10. Rinse motorcycle thoroughly with plain water to remove the detergent.
11. If possible, use compressed air and blow off water particles from the hard to reach areas of the motorcycle, electrical connections etc.
12. No direct jet at the edges of decal, electrical parts, coupler joints, silencer tail pipe, radiator lubrication points like steering cone kit, brake pedal, wheel bearings, chain, brake cam & swing arm bushes to be washed in spray mode only (not in jet mode).

---

## **WASHING PROCEDURE**

---

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

---

### **AFTER WASHING**

---

1. Ensure, the motorcycle is thoroughly dry by wiping with a clean soft lint free absorbent cloth or chamois leather.
2. Remove all adhesive tapes.
3. Lubricate control cables, pivots for footrest, side stand, center stand, brake and gear shifter linkages, drive chain etc with lube oil.
4. Polish the painted (except matt finish) and plated surfaces using recommended automobile polishing wax.
5. Start the engine and allow to run at an idling speed for a few minutes to warm up engine.
6. Drive the motorcycle slowly, apply both the brakes intermittently to dry up the water in brake pads.
7. Please clean/wipe out water spills completely inside the RH side panel before keeping tool kit, first aid kit and other relevant documents inside the right side panel.

---

## STORAGE PRECAUTIONS

---

In case your motorcycle is not going to be used for a month or more, the following precautions should be taken.

1. Get the motorcycle serviced through a Royal Enfield Authorised Dealer/ Service Centre.
2. Drain fuel tank and fuel line.
3. Spray engine oil inside the fuel tank to prevent rusting.
4. Remove spark plug. Pour in about 25 ml of clean engine oil through spark plug hole. Close the hole and crank engine several times and refit spark plug.
5. Clean rear chain thoroughly and apply a chain lube.
6. Remove battery from the motorcycle. Clean the terminals free of corrosion and apply petroleum jelly to terminals.
7. Store the battery in a cool, dry and well ventilated place.
8. Cover the silencer with plastic bags to prevent moisture entry. Set the motorcycle on its center stand.
9. Apply anti rust solutions on all plated parts. Take care not to apply this solution on rubber or painted parts.
10. Store motorcycle in a clean covered area free of moisture and dust.
11. For re-use after storage, it is preferable to get the motorcycle prepared through a Royal Enfield Authorised Dealer/Service Centre to ensure the motorcycle is restored to its peak operating conditions.
12. If the motorcycle is not used for a month or longer, It is advised to disconnect battery terminals and remove the battery. Before refitting the battery in the motorcycle, check the battery voltage is within specification, if not, recharge it from authorised service workshop/battery dealer.

---

## TROUBLESHOOTING

---

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

Complaint	Check/Observe	Suggestion/Remedy
Engine does not start	If the Ignition/Engine kill switch in "OFF" position	Switch it to "ON" position
	If inadequate fuel level in fuel tank	Top up the fuel
	If the lights are dim/weak horn sound	Weak or discharged battery / problem in charging circuit Contact Authorised service center
	If fuse is blown	1. Replace the fuse with same rating 2. Contact Authorised service center if problem persists

---

## TROUBLESHOOTING

---

Symptom	Observations	Check for/Remedy
Engine does not start	Connection issue with spark plug, cap, high tension cable	Reconnect spark plug, cap and high tension cable
Engine starts but shuts off immediately	If the MIL lamp in cluster is glowing	Contact Authorised service center

---

## **TROUBLESHOOTING**

---

Symptom	Observations	Check for/Remedy
Engine misfires & runs erratically/stops	If any adulteration/water in fuel	Contact Authorised service center
	If the engine is too hot	Switch "OFF" the engine and allow it to cool down

---

## **TROUBLESHOOTING**

---

Symptom	Observations	Check for/Remedy
Poor pickup	If engine RPM raises disproportionately to the vehicle speed	Adjust the clutch free play and contact Authorised service center
ABS (Anti lock braking system)	If the ABS lamp is continuously "ON"	Contact Authorised service center

---

## WARRANTY TERMS & CONDITIONS

---

Royal Enfield Motorcycles are manufactured by following best quality practices in respect of the material and workmanship.

Royal Enfield (RE) warrants its motorcycle to be free from manufacturing and material defect under normal use subject to following conditions.

1. RE will replace or repair defective part(s) at their Dealerships and Authorised Service Centre free of charge within a period of 3 Years/30,000 km from the date of sale. whichever is earlier.
2. In order to avail warranty benefits by second or subsequent owner the second/subsequent owner should inform the nearest Royal Enfield Service Centre about the purchase of the bike and shall fill in the requisite details in the form as requested by Royal Enfield.
3. The warranty shall be applicable only if all the services are availed in the respective period/kilometer ranges as per the schedule in the owner's manual from RE Authorised Dealer/Service Centre.
4. During the warranty period. RE's obligation shall be limited to repairing/replacing part(s) of the motorcycle for free only if the part(s). On examination is deemed to have a manufacturing defect. Defective part(s) which have been replaced will become the sole property of RE.
5. Consumables like oil, oil filter, fuel etc. used during warranty repair/replacement are not covered and chargeable to the customer.

---

## WARRANTY TERMS & CONDITIONS

---

6. Claims on proprietary items like tyres, tubes, spark plug, battery etc., should be taken up with the respective manufacturer or their authorised agents in the area directly by the customer. RE shall not be liable in any manner to replace them through their dealers. RE will, however, provide assistance in referring such claims on the respective manufacturer.
7. Warranty shall not apply to:
  - (a) Normal ageing, deterioration or rusting of plated parts, paints coat, rubber parts, soft items, glass items, plastic parts etc.
  - (b) Components like fuel filter, oil filter, air filter paper element, control cables, brake shoes/brake pads, clutch plates, drive chain & sprocket kit, steering ball races, electrical equipment, wiring harness etc., which are subjected to normal wear and tear.
  - (c) Failures occurred due to use of non recommended grade lubricants, fuel or improper level.
  - (d) Damages due to use of non-genuine parts, lack of proper maintenance, incorrect riding habits.
  - (e) Damages to engine management system parts (like ECU, throttle body, sensors, etc.) due to tampering which affects the performance of the motorcycle.
  - (f) Parts damaged due to accidents, collision, abuse etc.
  - (g) Irregularities not recognised as affecting the quality or function of the motorcycle such as slight vibration, oil leakage, discoloration of exhaust pipe bend and cat region/silencer/soft or hard shock absorber etc.
  - (h) Warranty is not applicable for discoloration of exhaust pipe & silencer, as it is a natural process that will happen during usage.
  - (i) Defects arising from fitment of unauthorised or additional electrical loads.
  - (j) Motorcycle serviced or repaired at unauthorised service centres.

---

## WARRANTY TERMS & CONDITIONS

---

(k) Motorcycle used for competitions/racing/stage rallying etc.

(l) Electrical component like bulbs, fuses etc., and electronic components 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.

(n) Oxidization of buffed/painted/powder coated items etc.

8. Use only Royal Enfield approved parts and accessories. Use of certain other manufacturer's performance parts will void your new motorcycle warranty.
9. RE reserves the right to finally decide on all warranty claims.
10. RE reserves the right to make changes in design of the motorcycle without any obligation to install these changes on previously supplied motorcycles.

---

## **EMISSION WARRANTY**

---

In compliance with the provisions of Rule 115(2) of the Central Motor Motorcycle 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 motorcycle, in normal use to which it may be subjected to.

This emission warranty is valid for 30,000 km/3 years from the date of first sale whichever earlier, 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 warrants that if on examination by its Royal Enfield Authorised Service Centre, the motorcycle fails to meet the specified emission standards, then the Authorised Service Centre shall take necessary corrective measures and shall, at its sole discretion, repair or replace free of charge 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 and/or our Authorised Service Centre and results of such examination will be final and binding. If on examination the warranty conditions of the part/s is/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 actuals.

---

## **EMISSION WARRANTY**

---

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.

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 Authorised Service Centre 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 Centre.

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.

The cost 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 motorcycle provided all the conditions as laid down in this document are met from the date of original sale of the motorcycle.

---

## **EMISSION WARRANTY**

---

### **THE WARRANTY SHALL APPLY IF THE CUSTOMER**

---

1. Observes all the important instructions and any other precautions listed in the owner's manual.
2. Under all circumstances uses lubricants and fuel as recommended by Royal Enfield.
3. Regularly obtains and carries out maintenance in accordance with Royal Enfield guidelines and enters the details in the log book.
4. Immediately approaches the nearest RE Authorised Dealer/Service centre upon discovery of failure to comply with the emission standard inspite of having maintained and used the motorcycle 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.
5. Production of a valid pollution under control certificate is necessary to claim emission warranty.
6. Produces the owner's manual and Log book for verification details.
7. Produces receipts covering maintenance of the motorcycle is specified in the owner's manual from the date of original purchase of the motorcycle.
8. Produces valid certificate of insurance and RTO Registration Certificate (R.C. Book).

---

## **EMISSION WARRANTY**

---

### **THE EMISSION WARRANTY SHALL NOT APPLY IF**

---

1. A valid "Pollution under control" certificate is not produced.
2. The motorcycle is not serviced by RE Authorised Dealer/Service Centre as per the service schedule described in the maintenance chart.
3. The motorcycle has been subjected to abnormal use, abuse, neglect and improper maintenance or has met with an accident.
4. Replacement parts not specified and approved by Royal Enfield have been used.
5. The motorcycle, or parts there of, has been altered, tampered with or modified or replaced in an unauthorised manner.
6. The odometer is not functioning or the odometer and/or its reading has been changed/tampered with, so that the actual distance covered cannot be readily determined.
7. The motorcycle has been used for competitions, races and rallies or for the purpose of establishing records.
8. On examination by Royal Enfield or its Authorised Dealer/Service Centre if the motorcycle shows that any of the conditions stipulated in the owner's manual with regard to use and maintenance have been violated.
9. 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.

---

## **EMISSION WARRANTY**

---

1. The emission related components are tampered with.
2. All service and parts related bills and vouchers incurred during the tenure of the emission warranty is not produced.
3. All maintenance activities carried out on the motorcycle during the tenure of the emission warranty are not entered in the log book.

---

## **TIPS TO BE ON THE RIGHT SIDE OF LAW**

---

1. Always get your motorcycle checked to meet the emission regulations through an authorised emission checking centre.
2. Always carry a valid "Pollution Under Control" certificate with you, as and if applicable by law.

---

## **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 Centre.
2. Use only Unleaded petrol (91 RON or higher) 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.

## SERVICE/MAINTENANCE RECORD

S No.	Type of Service	Schedule	Date	Job Card No.	km	Dealer Code	Brief details of service
1.	1 <sup>st</sup> Free Service*	500 km/ 45 Days					
2.	2 <sup>nd</sup> Free Service*	5,000 km/ 6 Months					
3.	3 <sup>rd</sup> Free Service*	10,000 km/ 12 Months					
4.	4 <sup>th</sup> Free Service*	15,000 km/18 Months					
5.	5 <sup>th</sup> Paid Service	20,000 km/ 24 Months					
6.	6 <sup>th</sup> Paid Service	25,000 km/ 30 Months					
7.	7 <sup>th</sup> Paid Service	30,000 km/ 36 Months					

\*Labour is free for this services alone

### NOTE

Cost of parts,lubricants,filters and other consumables are chargeable to the customer on their respective service activities. Refer the periodic maintenance chart for the respective service activities.

---

## **NOTE**

---

## Royal Enfield recommended Lubricants



## Royal Enfield recommended add ons to maintain your vehicle





**ROYAL ENFIELD**

Part No. RAM00385/A

ROYALENFIELD.COM

Edition: October 2021