

ROYAL ENFIELD SERVICE MANUAL

HIMALAYAN

EFI Model

PREFACE

"FIRST TIME RIGHT" is a very important element for enhancing Customer Satisfaction.

Royal Enfield is committed to upgrade the skills and knowledge of technicians so that they follow scientific repair techniques to ensure "FIRST TIME RIGHT" practices and carry out repairs accurately so that customers will enjoy trouble free performance at all times.

This manual will help in complete understanding of systematic procedures for dismantling, inspection, diagnosis and reassembly for the new Royal Enfield **Himalayan** motorcycle, in a simple and scientific manner.

While this manual is updated with latest Information and Specifications at the time of going to print, due to continuous improvements being done to improve performance, some of the data, illustrations etc., in this manual may be different from some of the parts fitted in the motorcycle.

Please do feel free to write to us at support@royalenfield.com, if you have any queries, clarification, suggestions or feedback.

With warm regards

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HIMALAYAN - VEHICLE VIEWS

VEHICLE VIEW LH



VEHICLE VIEW RH



VEHICLE VIEW TOP



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SECTION 01 - TECHNICAL SPECIFICATION

VEHICLE & VEHICLE SYSTEMS	
A.	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	24.5 bhp (18.02 KW) @ 6500 rpm
Max Torque	32 Nm @ 4250±250 rpm
Idle rpm	1250±50 rpm
Starting System	Electric Start
Air filter element	Paper element
Lubrication	Forced Lubrication, Wet sump
Engine oil capacity	2.3 L (Initial fill only), 2.0 L (Subsequent Refills)
Engine oil grade	SAE 15W 50 API SL Grade JASO MA 2
Cooling	Air cooled with Oil cooler
B.	IGNITION SYSTEM
Ignition system	Electronic ECU / Variable
Spark plug	Bosch - UR5CC
Spark plug gap	0.7 to 0.8 mm
C.	TRANSMISSION
Clutch	Wet Multi Plate
Primary drive	Gear
Primary ratio	2.312:1
Gear box	5 Speed, Constant Mesh
Gear Ratios	
1st Gear	1 st 2.916:1
2nd Gear	2 nd 1.833:1
3rd Gear	3 rd 1.428:1
4th Gear	4 th 1.173:1
5th Gear	5 th 1:000:1

VEHICLE & VEHICLE SYSTEMS		
	Secondary Drive	5/8" Chain & Sprocket
	Secondary Ratio	2.533:1
	Drive Chain links	110 links
D. CHASSIS		
	Frame	Half duplex split cradle
	Suspension Front	Telescopic, Hydraulic Damping, Front wheel travel: 200 mm
	Rear	Swing arm with Linkage type Hydraulic damping Mono shock, Rear wheel travel: 180 mm
	Brakes Front Disc	300mm Dia disc.
	Rear Disc	240mm Dia disc.
	Tyre size Front	90 / 90 - 21
	Rear	120 / 90 - 17
	Tyre Pressures	
	Solo Front	25 PSI / 1.75 Kg/cm ²
	Rear	32 PSI / 2.25 Kg/cm ²
	With Pillion Front	27 PSI / 1.89 Kg/cm ²
	Rear	34 PSI / 2.39 Kg/cm ²
	Steering lock	In built
	Fuel tank capacity*	15 ± 0.5 litres approx *
	Low fuel warning	Fuel Gauge (Red zone) 5.5 ± 0.5 lts.
	Dead stock (unusable fuel)	0.5 litre approx.
E. ELECTRICALS		
	Flywheel magneto	221W @ 1500 rpm
	Generation	Alternator, III Phase
	System	12V - DC
	Battery	12V - 8 AH MF
	Head lamp	12V, H4-60/55W - BULB
	Tail lamp / Brake lamp	12V- 4/TW LED
	Licence Plate illuminator	12V- LED
	Front position lamp	12V - LED

VEHICLE & VEHICLE SYSTEMS			
Speedometer lamp	12V - LED	WARNING Using bulbs/ electrical gadgets other than specified rating may 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.	WARNING Using bulbs/ electrical gadgets other than specified rating may 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.
Hi beam indicator	12V - LED		
Neutral lamp telltale	12V - LED		
Turn signal telltale	12V - LED		
Turn signal	12V, 10W * 4 Nos.		
Horn	12V, 2.5 Amp.		
Starter Motor	12V, 0.7 KW		
Instrument Cluster	Digital cluster with main and compass LCD		
Side Stand indicator	LCD Indication		
F. DIMENSIONS			
Length	2190 mm		
Width	840 mm		
Height	1360 mm		
Wheel base	1465 mm		
Ground clearance.	220 mm		
Saddle Height	800 mm		
G. WEIGHTS		<ul style="list-style-type: none"> ■ Values / Dimensions mentioned above are for reference only. ■ In view of continuous improvements being done on our motorcycles, the specifications are subject to change without prior notice. 	<ul style="list-style-type: none"> ■ Values / Dimensions mentioned above are for reference only. ■ In view of continuous improvements being done on our motorcycles, the specifications are subject to change without prior notice.
Kerb weight (90% fuel&oil)	191 kgs.		
Max. Pay load	174 Kgs.		

SECTION 02 - 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 Himalayan 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 may be required.

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

S. No.	DESCRIPTION	FREE SERVICE whichever is earlier					PAID SERVICE whichever is earlier						
		0.5	5	10	15	20	25	30	35	40	45	50	
	Kms (x1000)	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 1000 Kms or earlier as required												
2	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	R	I	R	I	R	I	R	I	R	
6	Oil cooler inlet & outlet pipes *	I	I	I	R	I	I	R	I	I	R	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	R	I	I	I	I	
9	Fuel Hose	I	I	I	R	I	I	R	I	I	R	I	
10	Fuel Hose & Clip/ Injector 'O' ring/ Seal Ring	I	I	I	R	I	I	R	I	I	R	I	
11	Fuel Pump	Check for screw tightness in all services											
12	Air filter element	C	C	R	C	R	C	R	C	R	C	R	
	Clean/ Replace more frequently if motorcycle always used industry / off Road conditions.												
13	Accelerator Cable	I	I	R	I	R	I	R	I	R	I	R	
14	Rubber Hose, Air filter to Throttle body	I	I	R	I	R	I	R	I	R	I	R	
15	PAV pipes & Hose clip	I	I	I	I	I	R	I	I	I	I	R	
16	Throttle body- Cleaning spray*	Carbo cleaner/ carb click/ or Fuel line cleaner spray every 6000 Km or 6 months whichever is earlier											
17	Clutch Cable	I	I	R	I	R	I	R	I	R	I	R	

A : Adjust C : Clean I : Inspect L : Lubricate R : Replace

* Refer Service Manual. # Check every time after vehicle is used for off road riding

NOTE:

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