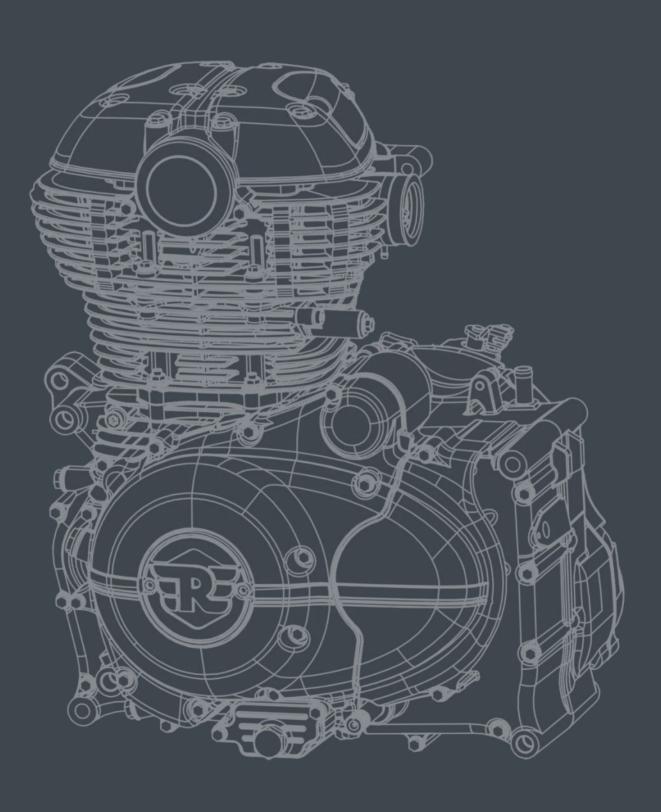
# EURO IV - HIMALAYAN LS410 SERVICE MANUAL



**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 of the new range of Royal Enfield, LS 410Single Cylinder, 4 Stroke, Overhead Cam, Air Cooled with Oil

cooler Engine, 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 differ

from the actual parts fitted in the engine.

Please do feel free to write to us at <a href="mailto:customerservice@royalenfield.com">customerservice@royalenfield.com</a>, if you have any queries, clarification, suggestions or feedback.

With warm regards

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> Part No: / Oct. '17

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## **ENGINE VIEWS LH & RH**





### **TECHNICAL SPECIFICATIONS**

| EN | ENGINE& ENGINE SYSTEMS   |  |  |  |  |
|----|--|--|--|--|--|
| A. | ENGINE   | LS 410   |  |  |  |
| 1  | Туре   | Single Cylinder, 4 Stroke SOHC, Air cooled, Fuel Injection |  |  |  |
| 2  | Bore   | 78 mm  |  |  |  |
| 3  | Stroke   | 86 mm  |  |  |  |
| 4  | Displacement   | 411 cc   |  |  |  |
| 5  | Compression ratio  | 9.5:1  |  |  |  |
| 6  | Max Power @ RPM  | 24.5 BHP(18.02 Kw @ 6500 RPM                               |  |  |  |
| 7  | Max Torque @ RPM   | 32 Nm @ 4000 RPM   |  |  |  |
| 8  | Idle RPM   | 1250 <u>+</u> 50 RPM @ EOT 80 deg                          |  |  |  |
| 9  | Starting   | Electric Start   |  |  |  |
| 10 | Air filter element   | Paper element  |  |  |  |
| 11 | Lubrication  | Forced Lubrication, Wet Sump                               |  |  |  |
| 12 | Engine oil tank capacity (1st Dry fill/ fill after complete Engine Overhaul) | 2.3 litres   |  |  |  |
|    | Engine oil tank capacity(Routine Oil change/<br>Subsequent refills)          | 2.0 litres   |  |  |  |
| 13 | Engine oil grade   | SAE 15W 50 API SL Grade JASO MA 2                          |  |  |  |
| 14 | Cooling  | Forced Air Cooled with Oil Cooler                          |  |  |  |
| B. | TRANSMISSION   |  |  |  |  |
| 1  | Clutch   | Wet, Multiplate  |  |  |  |
| 2  | Primary drive  | Gear   |  |  |  |
| 3  | Primary ratio  | 2.312: 1   |  |  |  |
| 4  | Gear box   | 5 Speed Constant Mesh                                      |  |  |  |
|    | Gear Ratios  |  |  |  |  |
|    | 1st Gear   | 2.916:1  |  |  |  |
| 5  | 2 <sup>nd</sup> Gear   | 1.833:1  |  |  |  |
|    | 3 <sup>rd</sup> Gear   | 1.428:1  |  |  |  |
|    | 4 <sup>th</sup> Gear   | 1.173:1  |  |  |  |
|    | 5 <sup>th</sup> Gear   | 1:000:1  |  |  |  |
| 6  | Secondary drive  | 5/8" Chain & Sprocket                                      |  |  |  |
| 7  | Secondary ratio  | 2.533:1  |  |  |  |
| C. | FUEL   |  |  |  |  |
| 1  | Fuel   | Petrol   |  |  |  |
| D. | IGNITION   | Digital Spark Ignition - TCI System                        |  |  |  |
| 1  | Ignition Advance / Ignition System   | 5-30° / Electronic Ignition, ECU/Variable                  |  |  |  |
| 2  | Spark plug   | Bosch - UR5CC  |  |  |  |
| 3  | Spark plug gap   | 0.7 to 0.8 mm  |  |  |  |
| E. | ELECTRICALS  |  |  |  |  |
| 1  | System   | 12V - DC   |  |  |  |
| 2  | Generation   | Alternator   |  |  |  |
| 3  | Alternator Output  | 170W @ 1500 RPM  |  |  |  |