ROYAL ERIFIELD SERVICE MANUAL

LS410

PREFACE

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

Royal Enfield is committed to upgradethe 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 customerservice@royalenfield.com, if you have any queries, clarification,

suggestions or feedback.

With warm regards

SERVICE HEAD QUARTERS

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Part No: 888438 / March '16

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ENGINE VIEWS LH & RH



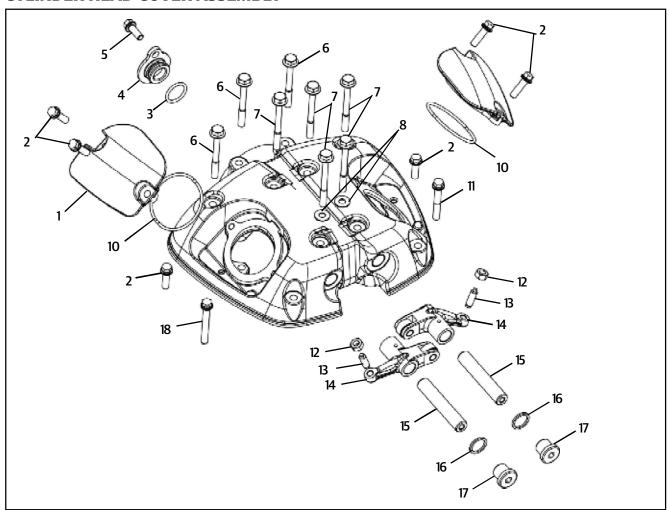


TECHNICAL SPECIFICATIONS

A. ENGINE LS 410 1 Type Single Cylinder, 4 Stroke SOHC 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 @ 4250 + 250 RPM 8 Idle RPM 1150 - 1500 RPM 9 Starting Electric Start 10 Air filter element Paper element 11 Lubrication Forced Lubrication, Wet Sump 12 Engine oil tank capacity (Propy fill/ fill after complete Engine Overhaul) 2.3 litres 12 Engine oil grade SAE 15W 50 APISL Grade JASO MA 2 14 Cooling Forced Air Cooled with Oil Cooler 15 TRANSMISSION Forced Air Cooled with Oil Cooler 16 Trimary drive Gear 2 Primary tratio 2.31:1 3 Gear box 5 Speed Constant Mesh 4 Gear<	EN	ENGINE& ENGINE SYSTEMS			
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7 Secondary ratio 2.53:1		5 th Gear	1:1		
,	6	Secondary drive	Sprockets & Chain (5/8" Pitch)		
C. FUEL	7	Secondary ratio	2.53:1		
	C.	FUEL			
1 Fuel Petrol	1	Fuel			
2 Induction CV Carburetor	2	Induction	CV Carburetor		
D. IGNITIONDigital Spark Ignition - TCI System	D.	IGNITION	Digital Spark Ignition - TCI System		
1 Ignition Advance 5-30°	1	Ignition Advance	5-30°		
2 Spark plug Bosch - UR5CC	2	Spark plug	Bosch - UR5CC		
3 Spark plug gap 0.7 to 0.8 mm			0.7 to 0.8 mm		
E. ELECTRICALS	E.	ELECTRICALS			
1 System 12V - DC	1	· ·	12V - DC		
2 Generation Alternator	2	Generation			
3 Alternator Output 170W @ 1500 RPM	3	Alternator Output	170W @ 1500 RPM		

EXPLODED VIEWS

CYLINDER HEAD COVER ASSEMBLY



S.NO.	DESCRIPTION
1	Cover - Tappet Inlet
2	Hex Flange Bolt-M6 X 21
3	'O' Ring - Camshaft Hole
4	Plug - Camshaft Hole
5	Hex Flange Bolt - M6 X 16
6	Hex Flange Bolt - M6 X 55
7	Hex Flange Bolt - M6 X 60
8	Gasket Washer - 6.2 X 14 X 1
9	Cover - Tappet Exhaust

S.NO.	DESCRIPTION
10	O' Ring - Tappet
11	Hex Flange Bolt - M6 X 40
12	Nut - Tappet Adjusting
13	Screws Tappet Adjusting
14	Arm comp valve Rocker
15	Shaft Valve Rocker Arm
16	Copper Washer
17	Plug - Rocker Shaft
18	Hex Flange Bolt - M6 X 45