

BSA SERVICE SHEET No. 428

Printed December, 1958

Model C15

USEFUL DATA

Engine

Capacity	...	...	...	...	249 c.c.
Cylinder Bore	...	...	...	...	67 mm.
Stroke	...	...	...	...	70 mm.
Compression Ratio	...	...	...	...	7.5 to 1.
Valve Timing Inlet Opens	...	...	...	...	26° before T.D.C.
Inlet Closes	...	...	...	...	70° after B.D.C.
Exhaust Opens	...	...	...	...	61½° before B.D.C.
Exhaust Closes	...	...	...	...	34½° after T.D.C.
Ignition Timing	...	...	...	...	1/16 in. before T.D.C.
Piston Rings (Compression)	...	...	...	...	.0625 in. wide
(Scraper)	...	...	...	...	.125 in. wide.
Piston Ring Gap Minimum	...	...	...	...	.009 in.
Maximum	...	...	...	...	.013 in.
Spark Plug Champion	...	...	...	...	N5
Plug Point Gap Minimum	...	...	...	...	.020 in.
Maximum	...	...	...	...	.025 in.
Contact Breaker Gap Fully Open	...	...	...	...	.015 in.
Tappet Clearance Inlet	...	...	...	...	.012 in.
Exhaust	...	...	...	...	.014 in.

Carburettor

Bore	...	...	...	...	¾ in.
Main Jet	...	...	...	...	140.
Pilot Jet	...	...	...	...	25.
Throttle Valve	...	...	...	...	4.
Needle Position	...	...	...	...	3.
Needle Jet	...	...	...	...	105.
Air Cleaner	...	...	...	...	Cheswick and Wright.

Transmission

Gear Ratios	Top	...	...	5.98.
	Third	...	...	7.65.
	Second	...	...	10.54.
	First	...	...	15.96.
Clutch Friction Plates	...	...	...	4.
Chain Sizes	Front	...	...	⅝ in. Duplex 70 pitches.
	Rear	...	...	⅝ in. - .335 in. Roller 113 pitches.
Sprocket Sizes	Engine	...	...	23 teeth.
	Gearbox	...	...	17 teeth.
	Clutch	...	...	52 teeth.
	Rear Chainwheel	...	...	45 teeth.

B.S.A. Service Sheet No. 428 (contd.)**Capacities**

Fuel Tank	2½ Imperial Gallons (11½ litres).
Oil Tank	4 pints (2½ litres).
Gearbox	½ pint (285 c.c.).
Front Forks	3½ fluid ounce (100 c.c.).
Primary Chaincase	1 pint (140 c.c.).

Wheels

Rim Size	WM2 17.
Tyre	3.25 x 17.
*Tyre Pressures Front	16 lbs. per square inch.
Rear	22 lbs. per square inch.
Brake Size Front and Rear	6 in. dia. 7/8 in. wide.

General Details

Front Suspension movement	5 in.
Rear Suspension movement	2¾ in.
Generator output	50 watts.
Battery capacity	13 amp. hour at 10 hour rate.
Overall length	78 in.
Wheel base	51½ in.
Ground clearance	5 in.
Saddle height	30 in.
Overall height	37 in.
Handlebar width	26 in.
Steering head angle	65°.
Steering lock angle	50°.
Weight	280 lbs.

*Recommended pressures based on rider's weight of 140 lbs. If the rider's weight exceeds 140 lbs. increase pressure as follows:

Front: Add 1 lb. per square inch per 28 lbs. increase in weight above 140 lbs.

Rear: Add 1 lb. per square inch per 14 lbs. increase in weight above 140 lbs.

When a pillion passenger or luggage is carried, the actual load bearing upon each tyre should be determined and the pressures increased in accordance with the Dunlop load and pressure schedule.