

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

BSA - SECTION J

D14/4 TORQUE WRENCH SETTINGS (DRY) J1

Listed below are a number of nuts and bolts for which it has been found necessary to determine torque settings. It is most important that these settings are strictly adhered to. Over-tightening or non-uniform tightening of the cylinder head and barrel nuts for instance, can cause distortion, resulting in loss of compression, increased engine wear and poor fuel economy.

TORQUE SETTINGS

Application | Thread Diameter and Form | T.p.i. | Hexagon A/F | Foot Pounds | Kilogram-metres

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Carburetter stud nuts | 0.3125" B.S.C. | 26 | 0.525" | 10/12 | 1.383/1.659

Clutch centre nut | 0.50" B.S.F. | 16 | 0.820" | 40/49 | 5.530/5.945

Cylinder head & barrel stud nuts | 0.3125" B.S.F. | 22 | 0.525" | 18/20 | 2.489/2.765

Fork leg pinch bolts | 0.3125" B.S.F. | 22 | 0.525" | 14/16 | 1.936/2.212

Gearbox sprocket nut | 0.8750" W.F. (L/H) | 20 | 1.200" | 50/55 | 6.913/7.604

Rotor fixing nut | 0.6250" B.S.C. | 20 | 1.010" | 55/60 | 7.604/8.295

Stator fixing nuts | 0.250" B.S.F. | 26 | 0.445" | 6/8 | 0.830/1.106

Steering column pinch bolt | 0.3125" B.S.F. | 22 | 0.525" | 14/16 | 1.936/2.212

Abbreviations:

A/F Across Flats.

B.S.C. British Standard Cycle.

B.S.F. British Standard Fine.

L/H Left-hand Thread.

T.P.I. Threads Per Inch.

W.F. Whitworth Form.

CHEMICAL LOCKS

The use of Locktite AVV Red is recommended on the clutch centre nut.

TORQUE WRENCH EXTENSIONS

The torque figures listed overleaf, indicate the load exerted at the end of a torque wrench. In some cases where space is restricted, the direct application of a torque wrench may be found impossible and a suitable extension or adaptor must be used.

When using an extension however, the wrench dial reading must be altered according to the following formula, in order to achieve the recommended torque load.

Recommended torque load \times length of torque wrench (in.)

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Wrench dial reading =

Length of torque wrench (in.) \times length of extension (in.)

For example: To obtain a torque load of 30 lb./ft. when using a two foot long wrench with a six inch extension, the dial reading would be calculated in the following manner:

$$30 \times 24$$

Wrench dial reading =

$$24 \times 6$$

Therefore = 24 lb./ft.