

# Bicycle assembly components torque wrench specs

The following list is only indicative and collects information only on some equipment brands.

## Bottom Brackets

Component	Brand	Newton meters	Inch-pounds
Bearing cups	Shimano® Hollowtech II	34.5~49.1 Nm	305~435 in-lbs
Cartridge bottom brackets	Campagnolo® (3-piece)	70 Nm	612 in-lbs
	Campagnolo® Ultra-Torque cups	35 Nm	310 in lbs
	FSA®	39.2~49 Nm	347~434in lbs
	Race Face®	47.5 Nm	420 in lbs
	Shimano®	49~69 Nm	435~610 in lbs
	Truvativ®	33.9~40.1 Nm	300~360 in lbs
	White Industries®	27 Nm	240 in lbs

## Brakes

Component	Brand	Newton meters	Inch-pounds
Brake pads (threaded stud)	Avid®	5.9~7.8 Nm	52~69 in lbs
	Cane Creek®	6.3~6.7 Nm	56~60 in lbs
	Campagnolo®	8 Nm	71 in lbs
	Mavic®	7~9 Nm	62~80 in lbs
	Shimano®	5~7 Nm	43~61 in lbs
	SRAM®	5.7~7.9 Nm	50~70 in lbs
Brake pads (smooth stud)	Shimano®	7.9~8.8 Nm	70~78 in lbs
Brake pads (sidepull, dual pivot)	Cane Creek®	6.3~6.7 Nm	56~60 in lbs
	Shimano®	6~8 Nm	52~69 in lbs
Cable pinch bolt (cantilever, linear pull/v-brake)	Avid® M6 bolt	5.9~7.8 Nm	52~69 in lbs
	ControlTech®	4.5~6.8 Nm	40~60 in lbs
	Shimano®	6~7.8 Nm	53~69 in lbs
	Shimano® M6 bolt	5.6~8.5 Nm	50~75 in lbs
	SRAM®	5.6~7.9 Nm	50~70 in lbs

Cable pinch bolt (sidepull, dual pivot)	Cane Creek®	7.7~8.1 Nm	68~72 in lbs
	Campagnolo®	5 Nm	44 in lbs
	Mavic®	7~9 Nm	62~80 in lbs
	Shimano®	6~8 Nm	52~69 in lbs
Caliper mounting bolt (cantilever, linear pull/v-brakes)	Avid®	4.9~6.9 Nm	43~61 in lbs
	ControlTech®	11.3~13.6 Nm	100~120 in lbs
	Shimano®	8~10 Nm	69~87 in lbs
	SRAM®	5.7~7.9 Nm	50~70 in lbs
Caliper mounting bolt (sidepull, dual, center pull)	Cane Creek®	7.7~8.1 Nm	68~72 in lbs
	Shimano®	7.84~9.8 Nm	70~86 in lbs
Cantilever straddle wire (M5 thread)	ControlTech®	7.7~8.1 Nm	40~60 in lbs
	Shimano®	3.9~4.9 Nm	35~43 in lbs

#### Brakes (Disc)

Component	Brand	Newton meters	Inch-pounds
Caliper mount	Avid®	9~10.2 Nm	80~90 in lbs
	Magura®	5.7 Nm	51 in lbs
	Shimano®	6~8 Nm	53~69 in lbs
Disc mounting bolts (6 M5 bolts)	Avid®	6.2 Nm	55 in lbs
	Hayes®	5.6 Nm	50 in lbs
	Magura®	3.8 Nm	34 in lbs
	Shimano®	2~4 Nm	18~35 in lbs
Disc mounting lockring (rotor to hub)	Shimano®	40 Nm	350 in lbs
Hydraulic hose fittings	Hayes®	6.2 Nm	55 in lbs

#### Cassettes & Freewheels

Component	Brand	Newton meters	Inch-pounds
Cassette lockring	Campagnolo®	50 Nm	442 in lbs
	Shimano®	29.4~49 Nm	260~434 in lbs

Freehub body	Bontrager®	45 Nm	400 in lbs
	Shimano®	35~50 Nm	305~434 in lbs
	Shimano® FH-M975/970 (14mm)	45~50 Nm	392~434 in lbs

### Chainrings

Component	Brand	Newton meters	Inch-pounds
Chainring bolt (steel)	Campagnolo®	8 Nm	71 in lbs
	Race Face®	11.3 Nm	100 in lbs
	Shimano®	7.9~10.7 Nm	70~95 in lbs
	Truvativ®	12.1~14 Nm	107~124 in lbs
Chainring bolt (aluminum)	Shimano®	5~10 Nm	44~88 in lbs
	Truvativ®	8.1~9 Nm	72~80 in lbs
Chainring spider to crank arm	Shimano®	50~70 Nm	443~620 in lbs

### Cranksets

Component	Brand	Newton meters	Inch-pounds
Crank bolts	FSA® M8 bolt	34~39 Nm	304~347 in lbs
	FSA® M14 bolt	49~59 Nm	434~521 in lbs
	FSA® MegaExo crank adjusting cap	0.4~0.7 Nm	32~53 in lbs
	FSA® MegaExo crank bolt pinch screws	9.8~11.2 Nm	87~100 in lbs
	Campagnolo® (3-piece)	32~38 Nm	282~336 in lbs
	Campagnolo® Ultra-Torque	42 Nm	371 in lbs
	Race Face®	54 Nm	480 in lbs
	Shimano®	34~44 Nm	305~391 in lbs

	Shimano® Octalink XTR crank arm bolt	40.3~49 Nm	357~435 in lbs
	Shimano® Hollowtech II crank bolt pinch screws	9.9~14.9 Nm	88~132 in lbs
	Syncros®	27 Nm	240 in lbs
	Truvativ® ISIS drive	43~47 Nm	384~420 in lbs
	Truvativ® square spindle	38~42 Nm	336~372 in lbs
	Truvativ® Powerspline	38~42 Nm	336~372 in lbs
	White Industries®	27~34 Nm	240~300 in lbs
Crank bolts (one key release)	Shimano®	5~6.8 Nm	44~60 in lbs
	Truvativ®	12.1~14 Nm	107~124 in lbs

### Derailleurs

Component	Brand	Newton meters	Inch-pounds
Front derailleur bolt (braze-on)	Campagnolo®	7 Nm	62 in lbs
Front derailleur clamp	Campagnolo®	7 Nm	62 in lbs
	Mavic®	2.9~4 Nm	26~35 in lbs
	Shimano®	5~7 Nm	44~60 in lbs
	SRAM®	5~7 Nm	44~60 in lbs
Front derailleur cable pinch	Campagnolo®	5 Nm	44 in lbs
	Mavic®	5~7 Nm	44~62 in lbs
	Shimano®	5~7 Nm	44~60 in lbs
	SRAM®	4.5 Nm	40 in lbs
Rear derailleur mounting bolt	Campagnolo®	15 Nm	133 in lbs
	Shimano®	8~10 Nm	70~90 in lbs
	SRAM®	8~9.6 Nm	70~85 in lbs

Rear derailleur cable pinch	Campagnolo®	6 Nm	53 in lbs
	Shimano®	3.9~5.9 Nm	35~52 in lbs
	SRAM®	4~5.1 Nm	35~45 in lbs
Rear derailleur pulley wheel	Shimano®	3 Nm	20 in lbs

### Levers (Brakes)

Component	Brand	Newton meters	Inch-pounds
Drop bar levers	Campagnolo®	9.9 Nm	88 in lbs
	Mavic®	7~9 Nm	62~80 in lbs
	Shimano®	6~7.8 Nm	53~69 in lbs
Mountain bike levers	Avid® built-in clamp	4.5~6.8 Nm	40~60 in lbs
	Avid® strap-type	3.2~4.1 Nm	28~36 in lbs
	Cane Creek®	6~9 Nm	53~80 in lbs
	Shimano®	6~7.8 Nm	53~69 in lbs
	SRAM®	3.4 Nm	30 in lbs
Upright bar levers	Campagnolo®	10 Nm	89 in lbs
	Shimano®	6~8 Nm	53~69 in lbs

### Levers (Shifter)

Component	Brand	Newton meters	Inch-pounds
Drop bar brake/shift combos	Campagnolo®	10 Nm	89 in lbs
	Shimano® STI	6~8 Nm	52~69 in lbs
Upright/flat bar shifters	Shimano®	5~7.4 Nm	44~69 in lbs
Twist-grip shifters	Shimano® REVO	6~7.9 Nm	53~70 in lbs
	SRAM®	1.9 Nm	17 in lbs

### Handlebars

Component	Brand	Newton meters	Inch-pounds
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Handle bar end extensions	Cane Creek® Gripnut	7.9 Nm	70 in lbs
	ControlTech®	16.3 Nm	144 in lbs

### Headsets

Component	Brand	Newton meters	Inch-pounds
Threaded Lockrings	Chris King® Gripnut	14.6~17 Nm	130~150 in lbs
	Tange-Seiki®	24.5 Nm	217 in lbs

### Pedals

Component	Brand	Newton meters	Inch-pounds
Pedal shaft into crank arm	Campagnolo®	40 Nm	354 in lbs
	FSA® Cranks	29~34 Nm	257~301 in lbs
	Ritchey®	34.7 Nm	307 in lbs
	Shimano®	35 Nm	304 in lbs
	Truvativ®	31.2 Nm	276 in lbs

### Seats & Seatposts

Component	Brand	Newton meters	Inch-pounds
Seat rail clamp	Campagnolo®	22 Nm	194 in lbs
	ControlTech® 1 bolt	33.9 Nm	300 in lbs
	ControlTech® 2 bolt	16.3 Nm	144 in lbs
	Shimano®	20~30 Nm	174~260 in lbs
	Syncros®	5 Nm	45 in lbs
	Time® Monolink	5 Nm	44 in lbs
	Truvativ® M6 Bolt	6~7.1 Nm	53~63 in lbs
	Truvativ® M8	22~24 Nm	195~212 in lbs

	Bolt		
Seatpost clamp	Campagnolo®	4~6.8 Nm	36~60 in lbs

### Stems

Component	Brand	Newton meters	Inch-pounds
Threaded stem bolt (quill-type)	ControlTech®	16.3~19 Nm	144~168 in lbs
	Shimano®	19.6~29.4 Nm	174~260 in lbs
Threadless stem (fork column bolts)	ControlTech®	13.6~16.2 Nm	120~144 in lbs
	Deda®	8 Nm	71 in lbs
	FSA® Carbon	8.8 Nm	78 in lbs
	Syncros® cotter bolt	10.1 Nm	90 in lbs
	Thomson®	5.4 Nm	48 in lbs
	Time® Monolink	5 Nm	45 in lbs
	Race Face®	6.2 Nm	55 in lbs
Threadless stem (1 or 2 bolt handlebar clamp)	ControlTech®	13.6~16.3 Nm	120~144 in lbs
	Shimano®	19.6~29.4 Nm	174~260 in lbs
Threadless stem (4 bolt handlebar clamp)	ControlTech®	13.6~16.3 Nm	120~144 in lbs
	Deda® magnesium	8 Nm	71 in lbs
	FSA® OS-115 carbon	8.8 Nm	78 in lbs
	Race Face®	6.2 Nm	55 in lbs
	Thomson®	5.4 Nm	48 in lbs
	Time® Monolink	6 Nm	53 in lbs

### Wheels & Hubs

Component	Brand	Newton meters	Inch-pounds
Axle wheel mount nuts	Shimano®	29.4~44.1 Nm	260~390 in lbs
	SRAM®	30.1~39.6 Nm	266~350 in lbs

Hub cone locknut	Bontrager®	17 Nm	150 in lbs
	Chris King®	12.2 Nm	100 in lbs
	Shimano®	9.8~24.5 Nm	87~217 in lbs