# **Miata Torque Specifications**

(Originally compiled by the <u>San Diego Miata Club</u>)

Except where noted, all torque specifications listed are in Foot-pounds / Newton-meters.

#### General

Spark plugs	11-17 (132-204 in-lbs)
Engine oil drain plug (19mm)	22-30/31-41
Gearbox drain plug (24mm)	29-43/39-59
Gearbox fill plug (square)	18-29/25-39
Differential drain plug (24mm)	29-40/39-54
Differential fill plug (23mm)	29-40/39-54
Wheel lug nuts	66-86/89-117

### Suspension

Sway bar bushing bolts front, rear	13-20/18-26 14-21/20-28
Swaybar end link bolts, both ends	27-40/36-54
Upper shock mount plate bolts	22-27/29-36
Upper shock nuts	23-34/31-46
Lower shock bolt	54-69/73-93
Lower control arm bolt, front	54-69/73-93
Spindle (vertical) bolt	54-69/73-93
Camber adjustment bolts, (D or H-style. Front, rear	69-83/94-112 54-70/73-95

#### **Brakes**

Front/rear bracket bolts	36-51/49-69
Caliper bolts - (Note: Some have reported stripping bolts. See thread.)  Front, rear	58-65/78-88 25-29/34-39
Front/rear banjo bolts	16-22/22-29

Rear adjuster plug bolt	9-12/12-16

### **Engine & Cooling**

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Crank pulley main bolt (1990 - early 1991)	80-87/108-118 (plus Loctite 242-blue)
Crank pulley main bolt (late 1991 - present)	116-122/157-165 (plus Loctite 242-blue)
Crank pulley bolts - 4	109 - 151 <b>in-lbs</b>
Cam cover bolts (must be done in correct order)	43-78 in-lbs
Alternator mounting bolt	27-38/37-52
Alternator tension adjustment bolt	14-19/19-25
Water pump - 4 bolts to block	14-19/19-25
Water pump pulley - 3 bolts	69-95 <b>in-lbs</b>
Water inlet pipe - 2 bolts to water	14-19/19-25
Radiator - upper bolts	14-19/19-25
Thermostat cover - 2 bolts	14-19/19-25
Timing belt tensioner bolt & idler pulley bolt	28-38/38-52
Timing belt cover bolts	69-95 in-lbs
Cylinder head bolts (must be done in stages and in correct order.)	56-60/76-81

# Intake / Exhaust

Airflow meter bolts	69-95 <b>in-lbs</b>
Intake manifold bracket	27-40/36-54
O2 sensor	by feel, as close to 22-36 ft-lbs as possible
Exhaust pipe clamp bolt (to bell	15-20/21-27
Bell housing bolts	48-65/65-88
Exhaust header nuts	28-34/38-46
Cat converter nuts (both ends)	30-41/40-55

# Clutch

Transmission front cover bolts	14-18/19-24
Flywheel bolts	71-75/96-102
Pressure plate bolts	14-19/19-25
Bell housing bolts	48-65/65-88
Prop shaft nuts	20-22/27-30
Power plant frame bolts	77-91/104-123
Starter motor bolts	28-38/38-51
Starter motor mounting bracket bolts	28-38/38-51
Slave cylinder fluid tube	9-16 (113-190 in. lbs.)
Slave cylinder mounting bolts	12-16/16-2