

## Tightening torques for front axle 2004 GT3 etc.

Attention: Do not grease screw connections in Dacromet finish (aluminium colour).

### Cross member/side member (1 component)

Location	Thread	Tightening torque [Nm] (ftlb.)
Cross member/side member to body (front and rear)	M14 x 1.5	160 (118)
Corner plate to side member	M10 x 1.5	65 (48)
Corner plate to body	M12 x 1.5	100 (74)
Corner plate to body (with diagonal arm and side member)	M14 x 1.5	160 (118)

### Diagonal brace

Location	Thread	Tightening torque [Nm] (ftlb.)
Diagonal brace to body and side member	M12 x 1.5	100 (74)

### Axle strut (control arm)

Location	Thread	Tightening torque [Nm] (ftlb.)
Axle strut to side member	M12 x 1.5	120 (89)
Axle strut to diagonal arm	M14 x 1.5	160 (118)
Axle strut (ball joint) to wheel carrier (also applies to GT3 RS)	M12 x 1.5	75 (56)
Camber basic setting to two-part axle strut - 911 GT3 / 911 GT3 RS	M8	27 (20)

### Spring strut/wheel carrier

Location	Thread	Tightening torque [Nm] (ftlb.)
Spring strut to wheel carrier (anti-roll bar mount) – 911 Carrera 2 (shock-absorber tube clamp) – 911 Carrera 4 / 911 GT3 / 911 GT3 RS	M12 x 1.5 M12 x 1.5	85 (63) 85 (63)
Spring seat clamp – 911 Carrera 4	M6	10 (7.5)
Spring strut mount to body	M8	33 (24)

Location	Thread	Tightening torque [Nm] (ftlb.)
- 911 GT3 / 911 GT3 RS	M8	35 (26)
Spring strut mount to piston rod - 911 GT3 / 911 GT3 RS	M14 x 1.5 M14 x 1.5	80 (59) 80 (59)
Anti-roll bar mating bearing to spring strut (lock nut) – 911 GT3	M52 x 1.5	50 (37)
Height adjustment to spring strut (lock nut) - 911 GT3 / 911 GT3 RS	M52 x 1.5	50 (37)
Brake cover plate to wheel carrier	M6	10 (7.5)
Brake disc to wheel hub	M6	10 (7.5)
Brake caliper to wheel carrier	M12 x 1.5	85 (63) <a href="#">1</a>
Speed sensor to wheel carrier	M6	10 (7.5)
Combination coupling to wheel carrier	M6	10 (7.5)
Retainer plate for wheel bearing to wheel carrier	M8	37 (27)
Wheel hub to wheel carrier	M22 x 1.5	460 (340)

<sup>1)</sup> Replace screws at front and rear axle whenever they have been removed.

#### Front-axle final drive/drive shaft (911 Carrera 4)

Location	Thread	Tightening torque [Nm] (ftlb.)
Front-axle drive shaft to final drive	M8	39 (29)
Front-axle drive shaft to wheel hub	M22 x 1.5	460 (340)
Rear front-axle transmission support to transmission bearing	M10	65 (48)
Rear front-axle transmission support to body	M10	65 (48)
Front front-axle transmission support to front-axle	M10	65 (48)

Location	Thread	Tightening torque [Nm] (ftlb.)
cross member		
Stud to front-axle cross member	M8	20 (15)
Front-axle transmission support at front to final drive	M10	65 (48)
Tank strap to body	M8	23 (17)

#### Anti-roll bar

Location	Thread	Tightening torque [Nm] (ftlb.)
Anti-roll bar to side member	M10 x 1.5	65 (48)
Anti-roll-bar mount to anti-roll bar	M10	46 (34)
Anti-roll-bar mount to anti-roll bar - 911 GT3 / 911 GT3 RS	M10	55 (41) <a href="#">3)</a>
Anti-roll bar mount to shock absorber pipe and wheel carrier – 911 Carrera 2	M12 x 1.5	85 (63)
Anti-roll bar mount to spring strut - 911 Carrera 4 / 911 GT3	M10	46 (34)
Anti-roll bar mount to wheel carrier - 911 GT3 RS	M10	50 (37) <a href="#">2)</a>
Anti-roll bar mating bearing to spring strut (lock nut) – 911 GT3	M52 x 1.5	50 (37)

<sup>2)</sup> Coat turns with Loctite 243 before fitting. Tighten all threaded connections immediately.

<sup>3)</sup> 3-stage tightening procedure. First Tighten to 50 Nm (37 ftlb.). Then loosen by 90° and then tighten to 55 Nm (41 ftlb.).

#### Steering (unlisted values in Repair Group 48)

Location	Thread	Tightening torque [Nm] (ftlb.)
Track rod (ball joint pin) to steering arm	M12 x 1.5	75 (56)
Universal joint (steering shaft) to steering gear	M8	23 (17) <a href="#">4)</a>
Steering gear to cross member	M10 x 1.5	65 (48) <a href="#">5)</a>

<sup>4)</sup> Replace fit bolt whenever it has been removed.

<sup>5)</sup> Replace fastening screws whenever they have been removed.

#### Wheel mounting

Location	Thread	Tightening torque [Nm] (ftlb.)
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Location	Thread	Tightening torque [Nm] (ftlb.)
Wheel to wheel hub	M14 x 1.5	130 (96) <a href="#">6)</a>

<sup>6)</sup> Thinly grease thread, shank and under head (between screw head bearing surface and spherical cap ring) of the wheel bolts with Optimoly TA (aluminium paste). Do not grease bearing surface of the spherical cap facing the wheel. If heavily contaminated, clean bolts first with a lint-free cloth.

## Tightening torques for rear axle

Attention: Do not grease screw connections in Dacromet finish (aluminium colour).

### Carrier side section/cross member

Location	Thread	Tightening torque [Nm] (ftlb.)
Carrier side section to body	M12 x 1.5	110 (81.5)
Studs for carrier side section to body (screw-in torque only)	M12 x 1.5	46 (34)
Cross member at rear to carrier side section	M12 x 1.5	110 (81.5)
Cross member at front to carrier side section	M10 x 1.5	65 (48)
Brake hose holder to carrier side section	M6	10 (7.5)
Diagonal brace to body	M10 x 1.5	65 (48)
Diagonal brace to cross member	M12 x 1.5	110 (81.5)
Diagonal brace to carrier side section (collar nut)	M10 x 1.5	23 (17)

### Axle strut

Location	Thread	Tightening torque [Nm] (ftlb.)
Control arm 2 (toe control arm) to wheel carrier to cross member (toe eccentric)	M12 x 1.5 M12 x 1.5	75 (56) 100 (74)
Lower axle strut to carrier side section (camber eccentric) to wheel carrier	M12 x 1.5 M12 x 1.5	100 (74) 75 (56)
Camber basic setting on two-part lower axle strut - 911 GT3 RS	M8	27 (20)
Diagonal arm		

Location	Thread	Tightening torque [Nm] (ftlb.)
to cross arm to carrier side section	M14 x 1.5 M14 x 1.5	160 (118) 180 (133)
Control arm 3 and control arm 4 (upper control arms) to carrier side section to wheel carrier	M12 x 1.5 M12 x 1.5	110 (81.5) 110 (81.5)

#### Wheel carrier

Location	Thread	Tightening torque [Nm] (ftlb.)
Wheel bearing to wheel carrier (lid)	M8	37 (27)
Speed sensor to wheel carrier	M6	10 (7.5)
Brake cover plate to wheel carrier	M6	10 (7.5)
Brake disc to wheel hub	M6	10 (7.5)
Brake caliper to wheel carrier	M12 x 1.5	85 (63) <a href="#">1</a>
Holder for combination wire to wheel carrier	M6	10 (7.5)

<sup>1)</sup> Replace screws at front and rear axle whenever they have been removed.

#### Spring strut

Location	Thread	Tightening torque [Nm] (ftlb.)
Spring strut to body - 911 Carrera - 911 GT3 / 911 GT3 RS	M10 M10 / 10.	46 (34) 46 (34) <a href="#">2</a>
Spring strut to wheel carrier	M12 x 1.5	100 (74)
Shock absorber to mount (piston rod) - 911 Carrera - 911 GT3 / 911 GT3 RS	M12 x 1.5 M12 x 1.5	58 (43) 60 (44)
Stabiliser mating bearing to spring strut (lock nut) - 911 GT3 / 911 GT3 RS	M52 x 1.5	50 (37)
Height adjustment to spring strut (lock nut) - 911 GT3 / 911 GT3 RS	M52 x 1.5	50 (37)

2) 911 GT3 with roll-over bar: Carry out a test drive after performing assembly work on the roll-over bar/spring strut support bolts on the body and then retighten the M10 fastening nuts (three per side) to the same torque.

#### Drive shaft

Location	Thread	Tightening torque [Nm] (ftlb.)
Drive shaft to transmission	M10	81 (60)
Drive shaft to wheel hub	M22 x 1.5	460 (340)

#### Stabiliser

Location	Thread	Tightening torque [Nm] (ftlb.)
Stabiliser to carrier side section	M8	23 (17)
Stabiliser mount to stabiliser and spring strut - 911 Carrera - 911 GT3 / 911 GT3 RS	M10 M10 / 10.	46 (34) 65 (48)
Stabiliser mating bearing to spring strut (lock nut) - 911 GT3 / 911 GT3 RS	M52 x 1.5	50 (37)

#### Ancillary equipment mounts

Location	Thread	Tightening torque [Nm] (ftlb.)
Engine mount to body	M8	23 (17)
Engine carrier to engine - 911 Carrera - 911 GT3	M10 M10	46 (34) 65 (48)
Engine mount to engine carrier	M12 x 1.5	85 (63)
Transmission support to body	M10 x 1.5	65 (48)
Stud for transmission support to body	M10	20 (15)
Longitudinal support to body	M10	65 (48)
Mount to longitudinal support	M10	65 (48)

#### Plug-in couplings for clutch and steering hydraulics

Location	Thread	Tightening torque [Nm] (ftlb.)
Steering pressure line	Wrench size 15 mm	30 (22)
Steering return line	Wrench size 19 mm	40 (30)

Location	Thread	Tightening torque [Nm] (ftlb.)
Clutch line	Wrench size 15 mm	30 (22)

**Wheel fastening**

Location	Thread	Tightening torque [Nm] (ftlb.)
Wheel to wheel hub	M14 x 1.5	130 (96) <a href="#">3)</a>

<sup>3)</sup> Thinly grease thread, shank and under head (between screw head bearing surface and spherical cap ring) of the wheel bolts with Optimoly TA (aluminium paste). Do not grease bearing surface of the spherical cap facing the wheel. If heavily contaminated, clean bolts first with a lint-free cloth.