WM, 4X00IN Tightening torques for rear axle

Technical values

Location	Des…	Type	Basic value	Tolerance 1	Tolerance 2
strut to body	Item 1: Combination screw, AM 10 x 35/ replace after every removal	Initial tightening	30 Nm (22.1 ftlb.)		
Strut to body	Item 1: Combination screw, AM 10 x 35 / replace after every removal	Final tightening	+ 90 °		
Strut to rear axle cross member	Item 2: Hexagon nut M10 x 1.5	Tightening torque	65 Nm (47.9 ftlb.)		
Support plate to rear axle cross member	Item 3: Screw, M10 x 1.5 x 20	Tightening torque	65 Nm (47.9 ftlb.)		
Strut with support plate to rear axle carrier side part	Item 4: Hexagon nut 10 x 1.5	Tightening torque	65 Nm (47.9 ftlb.)		
Additional bracket to support plate	Item 5: Screw M8 x 20	Tightening torque	20 Nm (14.8 ftlb.)		
support plate on V strut	Item 6: Hexagon nut M10 x 1.5	Tightening torque	65 Nm (47.9 ftlb.)		
bearing cover on anti-roll bar	Item 2: Screw M8 x 60 - replace	Tightening torque	20 Nm (14.8 ftlb.)		
bearing cover anti-roll bar	Item 2: Screw, M8 x 60 - replace	Final tightening torque angle	+ 90 °		
Transverse strut for anti-roll bar to support plate	Item 2: Screw M8 x 20	Tightening torque	20 Nm (14.8 ftlb.)		
shield on V strut (PDK only)	Item 1: Hexagon nut M6	Tightening torque	10 Nm (7.4 ftlb.)		
V strut to body	Item 2: Hexagon-head bolt, M10 x 1.5 x 55 / always replace following removal	Initial tightening	35 Nm (25.8 ftlb.)		

Location	Des…	Type	Basic value	Tolerance 1	Tolerance 2
V-strut to body	Item 2: Hexagon-head bolt M10 x 1.5 x 55 / replace after every removal	Final tightening	+ 60 °		
Rear-axle carrier side part to body (rear)	Item 3: Screw M10 x 80 / always replace following removal	Initial tightening	30 Nm (22.1 ftlb.)		
Rear-axle carrier side part to body (rear)	Item 3: Screw M10 x 80 / replace after every removal	Final tightening	+ 90 °		
Stud for (stud bolt) rear axle carrier side part to body (front)	Item 4: Stud M10 x 100	Tightening torque	25 Nm (18.4 ftlb.)		
rear axle carrier side part to body (front)	Item 5: Hexagon nut M10	Tightening torque	65 Nm (47.9 ftlb.)		
rear-axle cross member top to rear axle carrier side part	Item 6: Tighten hexagon-head bolt, M10 x 1.5 x 45 / M10 hexagon nut	Tightening torque	65 Nm (47.9 ftlb.)		
Steering tie rod to wheel bearing housing	Replace lock nut, M12 x 1.5	Tightening torque	85 Nm (62.7 ftlb.)		
Steering tie rod to rear axle carrier side part (toe eccentric adjuster)	Replace M12 x 1.5 lock nut	Tightening torque	110 Nm (81.1 ftlb.)		
Lower trailing arm to rear axle carrier side part (camber eccentric adjuster)	M12 x 1.5	Tightening torque	110 Nm (81.1 ftlb.)		
Diagonal control arm to trailing arm lower	Hexagon-head bolt, M14 x 1.5 x 75 + hexagon nut	Tightening torque	160 Nm (118 ftlb.)		
Diagonal arm to body	Replace hexagon-head bolt M12 x 1.5 x 95 + hexagon nut	Initial tightening	80 Nm (59 ftlb.)		

Location	Des…	Type	Basic value	Tolerance 1	Tolerance 2
Diagonal arm to body	Replace hexagon-head bolt M12 x 1.5 x 95 + hexagon nut	Final tightening	+ 60 °		
Trailing arm to wheel bearing housing (GT4 / Spyder)	Screw M12 x 1.5 x 95	Tightening torque	120 Nm (88.5 ftlb.)		
Lower trailing arm to wheel mount (cone)	Item 2: Lock nut, M12 x 1.5	Tightening torque	85 Nm (62.7 ftlb.)		
Lower air guide section to upper section	Item 2: M5 x 16 screw	Tightening torque	3.2 Nm (2.4 ftlb.)		
Ball pin for level sensor linkage to trailing arm holder	Item 1: Replace M6 lock nut	Tightening torque	10 Nm (7.4 ftlb.)		
Speed sensor to wheel bearing housing	Cheese head bolt, M6 x 16	Tightening torque	10 (7.5 ftlb.) Nm		
Retainer plate for wheel bearing to wheel bearing housing	Hexagon-head bolt, M8	Tightening torque	37 (27 ftlb.) Nm		
Holder to wheel bearing housing	Screw with washer assembly, M6 x 16	Tightening torque	10 (7.5 ftlb.) Nm		
Shock absorber (piston rod) to strut mount (conventional and PASM)	Item 1: Hexagon nut M14 x 1.5	Tightening torque	70 Nm (51.6 ftlb.)	+ 5 Nm (3.7 ftlb.)	
Spring strut to body	Item 2: Hexagon nut, M8	Tightening torque	33 Nm (24.3 ftlb.)		
Spring strut to top wheel bearing housing	Item 3: M12 x 1.5 / Replace screw and nut	Initial tightening	50 Nm (36.9 ftlb.)		
Spring strut to top wheel bearing housing	Item 3: M12 x 1.5 / Replace screw and nut	Final tightening	+ 180 °		
Spring strut to bottom wheel bearing housing (connecting link)	Item 4: M12 x 1.5 / replace hexagon nut	Initial tightening	50 Nm (36.9 ftlb.)		
Spring strut to bottom wheel bearing housing (connecting link)	Item 4: M12 x 1.5 / replace hexagon nut	Final tightening	+ 180 °		

Location	Des…	Type	Basic value	Tolerance 1	Tolerance 2
Sensor for body, rear	Hexagon-head bolt, M6/no. 3 (two sensors at the front, one sensor at the rear)	Tightening torque	10 (7.5 ftlb.) Nm		
Transverse strut with stabiliser bearing to rear axle carrier side part	Item 1: M8 x 60 hexagon-head bolt / replace after each disassembly	Initial tightening	20 Nm (14.8 ftlb.)		
Cross strut with stabilizer bearing on rear axle carrier side part	Item 1: M8 x 60 hexagon-head bolt / replace after each disassembly	Final tightening	+ 90 °		
Connecting link to anti-roll bar	Collar nut, M10 / replace	Initial tightening	40 Nm (29.5 ftlb.)		
Connecting link to anti-roll bar	Collar nut, M10 / replace	Final tightening	+ 30 °		
Connecting link to wheel bearing housing	Replace M12 x 1.5 / hexagon nut	Initial tightening	50 Nm (36.9 ftlb.)		
Connecting link to wheel bearing housing	Replace M12 x 1.5 / hexagon nut	Final tightening	+ 180 °		
Anti-roll bar mount GT4/718 Spyder / GT4 RS	Item 3: M8 x 60 hexagon-head bolt / replace after each disassembly	Initial tightening	20 Nm (14.8 ftlb.)		
Anti-roll bar mount GT4/718 Spyder / GT4 RS	Item 3: M8 x 60 hexagon-head bolt / replace after each disassembly	Final tightening torque angle	+ 90 °		

Location	Des…	Type	Basic value	Tolerance 1	Tolerance 2
Drive shaft to transmission flange (PDK and manual transmission)	Cheese head bolt, M10 x 46.5 (for 982) / M10 x 52 / always replace bolts with plates following removal	Initial tightening for	35 Nm (25.8 ftlb.)		
Drive shaft to transmission flange (PDK and manual transmission)	Cheese head bolt, M10 x 46.5 (for 982) / M10 x 52 (for 982 S/GTS) / Screws with plates following removal	Final tightening	+ 90 °		
Front drive shaft to wheel hub	Lock nut, M22 x 1.5 / always replace following removal	Tightening torque	460 Nm (339.3 ftlb.)		

Location	Des…	Type	Basic value	Tolerance 1	Tolerance 2
Wheel to wheel hub on front and rear axle, M14 x 1.5	Do not grease thread, shank and under the head (between screw head bearing surface and spherical cap ring) of the wheel bolts. Do not grease bearing surface of the spher-ical cap facing the wheel rim. If heavily soiled, clean bolts first with a lint-free cloth. Replace damaged wheel bolts (re-work not permit-ted).	Tightening torque	160 (118 ftlb.) Nm		