| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Bumper to front panel, top | E81, E87 | | | 6 Nm |
| | E82, E88 | | | 2.6 Nm |
| | E90, E91, E92, E93 | | | 5 Nm |
| 2AZ Carrier to body | E81, E87 | M8 | | 20 Nm |
| | E82, E88, E90, E91, E92, E93 | M8 | | 22 Nm |
| 3AZ License plate to bumper | E81, E82, E87, E88, E90, E91, E92, E93 | | | 1 Nm |
| 4AZ License plate to bumper (thread repair) | E81, E82, E87, E88, E90, E91, E92, E93 | M5 | | 4.5 Nm |

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Carrier to body | E81, E82, E87, E88, E90, E91, E92, E93 | M12 | | 66 Nm |
| 2AZ Bumper to guide, side panel | E81, E82, E87, E88, E90, E91, E92, E93 | | | 3 Nm |
| 3AZ Guide to side panel | E81, E82, E87, E88, E90, E91, E92, E93 | | | 3 Nm |
| 4AZ Bumper to guide, top middle | E81, E82, E87, E88, E90, E91, E92, E93 | | | 3 Nm |
| 5AZ Guide, top middle, to rear trim panel | E81, E82, E87, E88, E90, E91, E92, E93 | | | 3 Nm |

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Bracket, roof luggage rack on body | E36 / Z3 and M<br>Coupé, E39, E46, E81, E82, E87, E90, E91, E92 | M10 | | 20 Nm |
| 2AZ Water drain to body (plastic nut) | E46 | | | 1 Nm |
| Water drain to body (metal nut or rivet nut) | E46 | | | 1.8 Nm |
| 3AZ Roof railing to body | E39 | | Centre, front, rear | 24 Nm |
| | E61 | M8 | <br>settling time<br>Check | 16 Nm<br>15 min<br>16 Nm |
| | E83 | M8 | Front<br>Jointing torque<br>Release nut after settling time<br>Jointing torque<br>Torque angle | <br>21 Nm<br>15 min<br>21 Nm<br>120 ± 10 ° |
| | E83 | M8 | Centre, rear<br>settling time<br>Check | 21 Nm<br>15 min<br>21 Nm |
| | E91 | | | 25 Nm |
| | E70 | | | 19 Nm |
| 4AZ Handle strip to rear lid | E39 / Touring | | | 3 Nm |
| | E46, E53 | | | 2.5 Nm |
| | E83 | | | 1.8 Nm |
| 5AZ Cowl panel cover to body | E60, E61, E63, E64 | | | 2.5 Nm |

| | | | | |
|---|---|---|---|---|
| 6AZ Centre trim to rear lid | E65, E66, E67 | M8 | | 2.5 Nm |
| 7AZ Trim to hood/bonnet | E90, E91 | | | 2 Nm |

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Mirror to front door | E70, E81, E82, E87, E88, E90, E91, E92, E93 | | | 6 Nm |
| Initial screw connection for new rearview mirror (shaping of thread-cutting screws) | E70, E81, E82, E87, E88, E90, E91, E92, E93 | | | 8 Nm |
| 2AZ Carrier, gear selector switch, to carrier, centre console | E70 | M6 | | 5.6 Nm |

## 51 21 Front Door Locks

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Door lock to front door | E70, E81, E82, E87, E88, E90, E91, E92, E93 | | Install bolt with bolt cement. | 9.5 Nm |
| 2AZ Door striker to body | E70, E81, E82, E87, E88, E90, E91, E92, E93 | | | 18.5 Nm |
| 3AZ Door retainer to A-pillar | E70, E81, E82, E87, E88, E90, E91, E92, E93 | | | 22 Nm |
| 4AZ Door retainer to door | E81, E82, E87, E88, E90, E91, E92, E93 | | | 12 Nm |
| | E70 | | | 10 Nm |

## 51 23 Hood/bonnet locks

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Retaining hook to engine hood/bonnet (replace microencapsulated screws) | E81, E82, E87, E88, E90, E91, E92, E93 | | | 10 Nm |
| 2AZ Lock to body (replace microencapsulated screws) | E70, E81, E82, E87, E88, E90, E91, E92, E93 | | | 10 Nm |
| 3AZ Upper lock section (striker) to bonnet/hood | E70 | | | 10 Nm |

## 51 24 Rear lid locks

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Rear lid lock to rear lid | E81, E82, E87, E88, E90, E92, E93 | | | 10 Nm |
| | E91 | | | 20 Nm |
| 2AZ Striker to body | E81, E82, E87, E88, E90, E91, E92 | | | 10 Nm |
| 3AZ Fastener to rear lid | E82, E88, E90, E92, E93 | | | 10 Nm |
| 4AZ Striker to kinematics, rear module | E93 | | | 10 Nm |

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Door window glass to power window unit | E92, E93 | | With special tool 51 0 320 (longer lever arm) | 10 Nm<br>7 Nm |
| | E81 | | With special tool 51 3 240 (longer lever arm) | 12 Nm<br>7 Nm |
| | E82, E88 | | With special tool 51 3 240 (longer lever arm) | 10 Nm<br>6 Nm |

**51 33 Power windows, front**

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Window regulator to door | E70, E81, E82,<br>E87, E88, E90,<br>E91, E92, E93 | | | 10 Nm |
| 2AZ Motor to window regulator | E70, E87, E90,<br>E91, E92, E93 | | | 6 Nm |
| | E81, E82, E88 | | | 3 Nm |

## 51 41 Front door trim panel with armrests

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Door trim panel to front door (screw to armrest or door handle) | E81, E82, E87, E88, E90, E91, E92, E93 | | | 4 Nm |
| 2AZ Armrest to door trim panel | E81, E82, E87, E88 | | | 2 Nm |
| 3AZ Door handle to door trim panel | E81, E82, E87, E88 | | | 2 Nm |

**51 43 Side Trim Panel with Armrests**

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Trim, front roof pillar (A-pillar) on body | E81, E82, E87, E90, E91, E92 | | | 2.5 Nm |
| 2AZ Trim, rear roof pillar (C-pillar) on body | E81, E82, E87, E90, E91, E92 | | | 2.5 Nm |
| 3AZ Side trim panel to body | E92 | | | 4.0 Nm |
| | E81, E88 | | | 3.0 Nm |
| 4AZ Armrest to side trim panel | E81, E82, E88 | | | 2.0 Nm |

## 51 46 Panel, rear parcel shelf, roller sun blind

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Rear parcel shelf to body | E65, E66, E67 | | | 2.5 Nm |
| 2AZ Roller sun blind to rear parcel shelf | E38, E39 | | | 3 Nm |
| | E65, E66, E67 | | | 2 Nm |
| 3AZ Roller sun blind with rear parcel shelf to body | E38, E39 | | | 6 Nm |
| | E60, E65, E66, E67, E90, E92 | | | 4 Nm |
| 4AZ Cover, rollover bar | E88, E93 | | | 4.4 Nm |
| 5AZ Trim grille, air outlet, to rollover protection system | E88 | | | 3 Nm |
| | E93 | | | 8 Nm |

| | Type | Thread | Tightening specification | Measure |
|---|---|---|---|---|
| 1AZ Rear spoiler | E91 | | Screw<br>Nut | 3 Nm<br>7 Nm |
| 2AZ Tension strut in engine compartment | E81, E82, E87, E88, E90, E91, E92, E93 | M10 | Replace screws<br>Jointing torque<br>Torque angle | <br>40 Nm<br>60 ° |
| | E81, E82, E87, E88, E90, E91, E92, E93 | M12 x 1.5 | Replace screws<br>Jointing torque<br>Torque angle | <br>100 Nm<br>100 ° |
| 3AZ Tension strut to rear axle | E91 | M12 | Replace screws<br>Jointing torque<br>Torque angle | <br>100 Nm<br>90 ° |
| | E91 | M10 | | 50 Nm |
| 4AZ Support tube to support, steering column upper section | E87, E90, E91, E92, E93 | M8 | | 19 Nm |
| 5AZ Support tube to body | E87, E90, E91, E92, E93 | M8 | | 21 Nm |
| 6AZ Heater to support tube | E87, E90, E91, E92, E93 | | | 4 Nm |
| 7AZ Bracket, handle, to body | E82, E87, E90, E91 | | self-tapping screw | 3.5 Nm |
| 8AZ Bracket, suspension, dividing net to body | E91 | | | 11 Nm |
| 9AZ Multifunction pan to body | E81, E82, E87, E90, E91, E92, E93 | M6 | | 8 Nm |
| 10AZ V-strut, front axle carrier | E93 | M8 | Replace screws | |

| | | | | |
|---|---|---|---|---|
| | | | Jointing torque<br>Torque angle | 56 Nm<br>90 ° |
| | E93 | M10 | Replace screws<br>Jointing torque<br>Torque angle | <br>100 Nm<br>90 ° |
| | E88 | M10 to front axle carrier, front | | 50 Nm |
| | E88 | M10 to blind rivet nut | Jointing torque<br>Torque angle | 60 Nm<br>105 ° |
| | E88 | M10 to captive nut | Replace captive nut | 50 Nm |
| | E88 | M12 | Jointing torque<br>Torque angle | 100 Nm<br>105 ° |
| 11AZ Diagonal strut, front end | E88, E93 | Nut | Replace nut | 56 Nm |
| | E88, E93 | Screw | Replace screws<br>Jointing torque<br>Torque angle | <br>56 Nm<br>90 ° |
| 12AZ Protecting skid / mounting bracket to front axle carrier | E93 | M8 | Replace screws<br>Jointing torque<br>Torque angle | <br>56 Nm<br>90 ° |
| | E88 | M10 | Replace screws | 50 Nm |
| 13AZ Rear middle tension strut to underbody bracket | E93 / from 03_2007 | M8 | | 28 Nm |
| 14AZ Battery carrier to body | E93 | M8 | | 19 Nm |
| 15AZ Vibration damper to battery carrier | E93 | M8 | | 19 Nm |
| 16AZ Grounding strap to body | E93 | M6 | | 8 Nm |
| 17AZ Bulkhead connection, suspension cross-brace, to holder, spring suspension cross-brace | E92 / M3 | M12 x 1.5 | Replace screw<br>Jointing torque<br>Torque angle | <br>100 Nm<br>100 ° |

| | | | | |
|---|---|---|---|---|
| 18AZ Suspension cross-brace to bulkhead connection, suspension cross-brace | E92 / M3 | M8 | Replace screws | 34 Nm |
| 19AZ Suspension cross-brace to bulkhead connection, suspension cross-brace / ring, suspension cross-brace | E92 / M3 | M8 | Replace nuts | 34 Nm |
| 20AZ Tension strut to underbody cross-member | E88, E93 | M10 | | 50 Nm |
| 21AZ Tension strut to frame side member locating bushing | E88, E93 / from 03_2007 | M12 | Jointing torque<br>Torque angle | 100 Nm<br>105 ° |
| 22AZ Tension struts to underbody triangle | E88, E93 / from 03_2007 | M12 | Jointing torque<br>Torque angle | 100 Nm<br>105 ° |
| 23AZ Left tension strut to right tension strut (rear axle) | E88, E93 / from 03_2007 | M10 | Jointing torque<br>Torque angle | 56 Nm<br>105 ° |
| 24AZ Rear middle tension strut to underbody bracket/triangle bracket | E93 / up to 03_2007 | M8 | Jointing torque | 19 Nm |
| 25AZ Tension strut to frame side member locating bushing | E93 / up to 03_2007 | M12 | Jointing torque<br>Torque angle | 100 Nm<br>90 ° |
| 26AZ Left and right tension strut to underbody triangle | E93 / up to 03_2007 | M12 | Jointing torque<br>Torque angle | 100 Nm<br>90 ° |
| 27AZ Strut, rollover protection system, to rollover protection system | E88, E93 | M10 | Jointing torque<br>Torque angle | 56 Nm<br>100 ° |
| 28AZ Strut, rollover protection system, to body | E88, E93 | M10 | Jointing torque<br>Torque angle | 56 Nm<br>100 ° |