

33 10 Rear axle final drive

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Clutch to rear axle final drive	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD	M10		75 Nm
2AZ Longitudinal torque distribution control unit to holder	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD	M6		10 Nm
3AZ Longitudinal torque distribution control unit holder to rear axle differential	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD	M6		10 Nm
4AZ Three-hole flange to rear axle differential clutch	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD		Renew nut.	150 Nm
5AZ Hydraulic pump to clutch, rear axle final drive	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD	M6		10 Nm
6AZ Pressure relief valve on rear axle differential clutch	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD			15 Nm

33 11 Housing of rear axle differential with oil filler cap

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Screw plug with O-ring	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M22	Replace screw plug.	60 Nm
2AZ Oil filler plug for oil filler cap on rear axle differential	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M8	Replace sealing ring.	10 Nm
3AZ Oil filler cap on rear axle differential	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M6		10 Nm

33 17 Rear axle final drive suspension

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Rear axle final drive to rear axle support	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD	M12		100 Nm
2AZ Rear axle final drive to cross member	F39AWD / F45AWD / F46AWD / F48AWD / F49AWD	M10		56 Nm

3330 Overview of tightening torques

Cross-member/torsion strut to axle support and mounting			
M12x48 Renew screws.	Jointing torque		100Nm
	Angle of rotation		90 Å°

33 31 Rear axle support

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Rear axle carrier to body	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew screws.	100 Nm
2AZ Cross member/bridge to rear axle support	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew screws. Jointing torque Angle of rotation	100 Nm 90 Å°
3AZ Cross member to body	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M12		100 Nm
4AZ Cross member to rear axle final drive	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M10		56 Nm
5AZ Hydraulic vibration absorber to cross member	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M12	Renew screw.	96 Nm
6AZ Vibration absorber to cross member	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M8	Renew screw.	28 Nm
7AZ Additional mass to cross member	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M8	Renew screw.	28 Nm
8AZ Cover to cross member/rear axle differential	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M6		12 Nm

33 32 Axle guide and axle strut

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Upper wishbone to trailing arm	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew nut. Tighten in normal position.	100 Nm
2AZ Lower wishbone to trailing arm	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew screw and nut. Tighten in normal position.	100 Nm
3AZ Wishbone to rear axle support	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew nut. Tighten in normal position.	100 Nm
4AZ Trailing arm bearing support to trailing arm	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew nut. Tighten in normal position.	100 Nm
5AZ Trailing arm bearing support to body	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew screw.	100 Nm
6AZ Cover to trailing arm	F39 / F45 / F46 / F48 / F49 / F52			3 Nm

33 31 Rear axle support

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Rear axle carrier to body	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew screws.	100 Nm
2AZ Cross member/bridge to rear axle support	F39 / F45 / F46 / F48 / F49 / F52	M12	Renew screws. Jointing torque Angle of rotation	100 Nm 90 Å°
3AZ Cross member to body	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M12		100 Nm
4AZ Cross member to rear axle final drive	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M10		56 Nm
5AZ Hydraulic vibration absorber to cross member	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M12	Renew screw.	96 Nm
6AZ Vibration absorber to cross member	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M8	Renew screw.	28 Nm
7AZ Additional mass to cross member	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M8	Renew screw.	28 Nm
8AZ Cover to cross member/rear axle differential	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M6		12 Nm

33 41 Wheel Bearings

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Wheel bearing to trailing arm	F39 / F45 / F46 / F48 / F49 / F52	M12	Jointing torque and angle of rotation must be observed without fail. Renew screws. Jointing torque Angle of rotation	100 Nm 90 °
2AZ Wheel bearing (hub) on output shaft	F39 AWD / F45 AWD / F46 AWD / F48 AWD / F49 AWD	M16	Jointing torque and angle of rotation must be observed without fail. Renew screw. Jointing torque Angle of rotation	210 Nm 90 °

33 52 Shock Absorbers

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Shock absorber to trailing arm	F39 / F45 / F46 / F48 / F49 / F52	M14		165 Nm
2AZ Nut and locknut/self-locking nut	F39 / F45 / F46 / F48 / F49 / F52	M8		28 Nm
3AZ Support bearing on shock absorber	F39 / F45 / F46 / F48 / F49 / F52	M10	Shock absorber basic version! Renew nut.	38 Nm
	F39 / F45 / F46 / F48 / F49 / F52	M12	EDC shock absorber! Replace nut.	32 Nm

33 55 Anti-roll bar

Tightening Torques

	Type	Thread	Tightening specifications	Torque
1AZ Anti-roll bar link to anti-roll bar	F39 / F45 / F46 / F48 / F49 / F52	M10	Replace nut.	56 Nm
2AZ Anti-roll bar link to trailing arm	F39 / F45 / F46 / F48 / F49 / F52	M8		28 Nm
3AZ Retaining bracket, anti-roll bar to rear axle support	F39 / F45 / F46 / F48 / F49 / F52	M8		28 Nm

33 operating fluid overview

Transmission oil

Hypoid Axle Oil G4	500 ml, Bottle	83222447362
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Transmission oil

Hypoid Axle Oil G3	500 ml, Bottle	83222413512
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Transmission oil

Rear axle differential oil SAF-XJ Booster	3x 1 l, Bottle	83222282583
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Transmission oil

Rear axle differential oil SAF Carbon Mod	500 ml, Bottle	83120445832
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Transmission oil

Hypoid Axle Oil G2	500 ml, Bottle	83222413511
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Transmission oil

Technically suitable rear axle differential oils		
Main group 33		

Transmission oil

BMW Synthetics OSP	1 l, Bottle	83222365987
	60 l, Barrel	83229407768

Transmission oil

BMW HOC oil	850 ml, Bottle	83222413513
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Transmission oil

Rear axle differential oil MSP/A * TU = Trade Unit. TU numbers cannot be ordered! For invoicing purposes only.	1 l, Bottle	83222365988
	1000 ml, TU*	83229405462