

13 31 Fuel Pump with Drive and Pipes

Tightening Torques

	Type	thread	tightening specification	Torque
1AZ Fuel pump to engine	All			12 Nm
2AZ Fuel pipe coupling bolt	All / with K-Jetr.	M8		9 Nm
3AZ Fuel pipe coupling bolt	All / with K-Jetr.	M12		20 Nm
4AZ Fuel pipe to pressure regulator	All / with L-Jetr.			30 Nm
5AZ Return pipe connector to pressure regulator	All / with L-Jetr.			27 Nm

1332 Overview of tightening torques

Fuel filter on vehicle underbody		
M6	Tightening torque	6Nm

1351 Overview of tightening torques

Central bolt of high pressure pump to camshaft sprocket

M12x1	Tightening torque	65Nm
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High pressure pump to crankcase

M8x33	Tightening torque	19Nm
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Holder of high pressure pump to crankcase

M8x33	Tightening torque	19Nm
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Screw plug to end cover

M34x1.5	Tightening torque	20Nm
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1353 Overview of tightening torques

Clamping claw facing to cylinder head cover		
M6	Tightening torque	10Nm
Fuel hose clamp to high pressure pump		
Clamp 15-18	Tightening torque	3Nm
Fuel preheating on fuel filter		
	Tightening torque	2Nm
High pressure lines between high pressure pump and rail		
High-pressure pipe	Tightening torque	28Nm
High pressure lines between injector and rail		
High-pressure pipe	Tightening torque	28Nm
High-pressure control valve to rail		
	Jointing torque	60Nm
	Detach the rail pressure regulating valve.	90°
	Tightening torque	85Nm
Holder fuel lines to intake plenum		
TS6X20	Tightening torque	5,5Nm
Injector to cylinder head cover		
M8	Jointing torque	8Nm
	Angle of rotation	120°
Oil dipstick tube on crankcase		
M8x16	Tightening torque	19Nm
Rail pressure sensor to rail		
Sensor	Tightening torque	70Nm

Rail to cylinder head cover

M8

Tightening torque

19Nm

1354 Overview of tightening torques

Throttle body to intake plenum		
6x50	Tightening torque	7Nm

1362 Overview of tightening torques

Cable channel to cylinder head cover		
TS5x20	Tightening torque	3,5Nm
Camshaft sensor to cylinder head cover		
TS5x20	Tightening torque	4Nm
Charging pressure sensor to manifold		
Bolt MS6x20	Tightening torque	5Nm
Clamp for the pressure hose on the differential pressure sensor		
Clamp 15â€“19mm	Tightening torque	3Nm
Combustion chamber pressure sensor to cylinder head		
Sensor	Tightening torque	16Nm
Coolant temperature sensor at cylinder head		
Sensor	Tightening torque	3,5Nm
Crankshaft sensor to timing case cover		
M5	Tightening torque	5Nm
Diesel particulate sensor to exhaust system		
Sensor	Tightening torque	50Nm
Differential pressure sensor for low-pressure exhaust-gas recirculation		
TS5x20	Tightening torque	4Nm
Differential pressure sensor of diesel particulate filter on cylinder head cover		
TS5x20	Tightening torque	4Nm
Exhaust gas pressure sensor		
M14x1.5	Tightening torque	13,5Nm
Exhaust pipe for exhaust gas pressure sensor to exhaust manifold		
Banjo bolt M12x25	Tightening torque	30Nm

Exhaust pipe for exhaust gas pressure sensor to retaining plate for sensor system

TS6x20	Tightening torque	5,7Nm
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Exhaust temperature sensor for EGR

Sensor	Tightening torque	21,7Nm
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Exhaust temperature sensor for low-pressure exhaust-gas recirculation

Sensor	Tightening torque	20Nm
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Exhaust temperature sensor for the exhaust system after catalytic converter before diesel particulate filter

Sensor	Tightening torque	30Nm
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Exhaust temperature sensor to exhaust turbocharger

Sensor	Tightening torque	30Nm
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Exhaust-gas temperature sensor to diesel particulate filter

Sensor	Tightening torque	30Nm
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Exhaust-gas temperature sensor upstream of SCR catalytic converter

Sensor	Tightening torque	30Nm
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Front oxygen sensor to top of diesel particulate filter

Sensor	Tightening torque	50Nm
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Hot film air mass meter to intake silencer

TS4x16	Tightening torque	1,5Nm
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Monitoring sensor

Sensor	Tightening torque	50Nm
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Nitrogen oxide sensor before SCR catalytic converter

Sensor	Tightening torque	50Nm
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Nitrogen oxide sensor downstream of SCR catalytic converter

Sensor	Tightening torque	50Nm
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Retaining plate for the sensor system on the cylinder head cover

TS6x20

Tightening torque

5Nm

1371 Overview of tightening torques

Cable clip to clean air pipe		
TS5x20	Tightening torque	4Nm
Clean air pipe to upper section of intake filter housing		
Clamp	Tightening torque	3Nm
Intake filter housing upper section to intake filter housing lower section		
Oval-head screw	Tightening torque	2,5Nm
Intake silencer housing to resonator		
TS5x20	Tightening torque	2,5Nm
Lower clean air pipe to exhaust turbocharger		
M6x20 Renew screw.	Tightening torque	8Nm
Upper clean air pipe clamp to lower clean air pipe		
Clamp	Tightening torque	3Nm

