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Specifications

Sealers

Description	Land Rover Part No.
Camshaft caps	8510302
'T' joints - ladder frame to engine block	STC 50550
Coolant plug - threaded	STC 50552
Oil pump upper middle retaining bolt	STC 50552

Lubricants

Description	Specification
Engine oil, SAE 5W-30	Use 5W/30 oil to specification WSS-M2C-913B meeting ACEA B1/B3

Note: WSS is a Ford prefix to the oil specification **Capacities**

Engine Oil Capacity	Specification
Dry fill including filter	6.55 litres (11.5 pints) (6.9 US quarts)
Oil and filter change	5.54 litres (9.6 pints) (5.8 US quarts)
Amount of oil required to bring level from 'MIN' to 'MAX' mark on oil level indicator	1.5 litres (2.6 pints) (1.6 US quarts)

Dimensions

Item	Specification
Length	523 mm (20.59 in)
Width	717 mm (28.25 in)
Height	771 mm (30.35 in)

General Specifications

Item	Specification
Type	2.7 litre, 60 degree 'V', common rail direct injection, turbocharged and intercooled diesel, twin overhead camshafts, 4 valves per cylinder
Cylinder arrangement	V6, numbers 1 and 4 cylinders at front of engine when engine is viewed from rear
Cylinder numbering	Number 1 cylinder - right hand bank; Number 4 cylinder - left hand bank
Bore - nominal	81.0 mm (3.188 in)
Stroke	88.0 mm (3.464 in)
Capacity	2720 cm ³ (165.9 in ³)
Firing order	1 - 4 - 2 - 5 - 3 - 6
Compression ratio	17.3:1
Direction of rotation	Anti-clockwise viewed from rear of engine

Maximum power	147 kW (200 PS) (197 bhp) @ 4000 rev/min
Maximum torque	440 Nm (324 lb-ft) @ 1900 rev/min
Engine oil pressure:	
At idle	0.7 bar (70 kPa) (10 lb/in ²)
At 3500 rev/min	1.9 bar (190kPa) (27.5 lb/ft ²)

Torque Specifications

Description	Nm	lb-ft
Accessory drive belt idler retaining bolt	47	35
Accessory drive belt tensioner M8 retaining bolts	47	35
Accessory drive belt tensioner M10 retaining bolts	25	18
Air conditioning (A/C) compressor retaining bolts	23	17
A/C compressor mounting bracket retaining bolts	23	17
A/C compressor low pressure pipe fixing	9	7
A/C manifold retaining bolt	20	15
Battery positive cable mounting bolts	10	7
* Camshaft inner bearing cap retaining bolts		
Stage 1: tighten bolts 1 to 14	1	1
Stage 2: tighten bolts 1 to 14	5	4
Stage 3: tighten bolts 1 to 14	10	7
* Camshaft outer bearing cap retaining bolts		
Stage 1: tighten bolts 1 to 4	1	1
Stage 2: tighten bolts 1 to 4	5	4
Stage 3: tighten bolts 1 to 4	10	7
Camshaft position sensor retaining bolt	10	7
+1 Camshaft hub retaining bolts		
Stage 1	80	59
Stage 2	Further 90°	Further 90°
Camshaft pulley retaining bolts	23	17
Camshaft timing belt cover securing bolts	10	7
+2 Crankshaft pulley retaining bolt		
Stage 1	100	74
Stage 2	Further 90°	Further 90°
Crankshaft damper bolts	14	10
Crankshaft position sensor retaining bolt	5	4
Crankshaft rear seal retainer plate	10	7
Coolant outlet elbow	10	7
*+2 Cylinder head retaining bolts		
Stage 1	20	15
Stage 2	40	30
Stage 3	80	59
Stage 4	Further 180°	Further 180°
Differential front mounting bracket heat shield	10	7
EGR valve inlet tube	10	7
EGR valve mounting bolts	10	7

EGR valve support bracket fixing	10	7
Engine breather tube securing bolt	10	7
Engine mount retaining nuts to cross member	62	46
Engine mount bracket to engine mount retaining bolts	62	46
Engine mount bracket to engine block retaining bolts	115	85
Exhaust cross over pipe retaining nuts	24	18
Exhaust manifold heat shield retaining bolts	10	7
Exhaust manifold retaining nuts	23	17
Exhaust manifold retaining studs	13	10
*+ Flexplate retaining bolts		
Stage 1	50	37
Stage 2	Further 45°	Further 45°
Stage 3	Further 45°	Further 45°
Fuel injection pump	23	17
Fuel injection pump pulley retaining nut	50	37
Fuel injection supply manifold	23	17
Fuel injection supply manifold securing bracket	23	17
Fuel injection supply line unions		
Stage 1 - High pressure fuel supply line union at the fuel injection diverter rail	15	11
Stage 2 - High pressure fuel supply line union at the fuel injection supply manifold	15	11
Stage 3 - High pressure fuel supply line union at the fuel injection diverter rail	30	22
Stage 4 - High pressure fuel supply line union at the fuel injection supply manifold	30	22
Fuel injection high pressure supply line mounting bolt	10	7
Fuel injector retaining bolts	10	7
Fuel filter mounting bolts	10	7
Generator retaining bolts	23	17
Generator mount bracket retaining bolts	23	17
Glow plugs	11	8
Intake air shut off throttle elbow support bracket bolts	10	7
Knock sensor retaining bolts	20	15
Oil cooler to cylinder block retaining bolts	10	7
Oil level indicator tube upper retaining bolt	10	7
Oil pan retaining bolts	10	7
Oil pump screen and pick-up tube	10	7
Oil pump to engine block retaining bolts	10	7
Oil pan drain plug	23	17
Oil separator retaining bolts	10	7
Oil temperature sensor	10	7
Oil filter	25	18
Piston cooling jet retaining bolt	10	7
Power steering bracket retaining bolts	23	17
Power steering pump retaining bolts	23	17
Power steering high pressure pipe fixing	25	18
Primary timing chain tensioner retaining bolts	10	7
Secondary timing chain tensioner bolts	10	7
Starter motor retaining bolts	45	33

Timing belt tensioner retaining bolt	24	18
Timing belt idler pulley retaining bolt	45	33
Transmission fluid cooler pipe securing bracket	10	7
Transmission retaining bolts	45	33
Turbo heat shield	10	7
Turbo support bracket	22	16
Coolant pump retaining bolts	10	7
Coolant pump pulley retaining bolts	23	17
Coolant pump outlet pipe retaining bolts	10	7
Valve cover retaining bolts	10	7
Vacuum pump retaining bolts	23	17
Vacuum pump retaining nuts	13	10

* Bolts must be tightened in sequence + New bolts must be installed ¹ Lightly oil bolt threads ² Do not apply lubricant to bolt threads