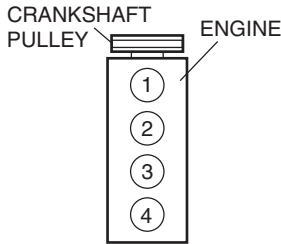


ENGINE TECHNICAL DATA [L3 Turbo]

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Item	Specification
Standard valve clearance [Engine cold]	IN: 0.22—0.28 mm {0.0087—0.011 in} EX: 0.27—0.33 mm {0.011—0.012 in}
Compression	Standard: 1,280 kPa {13.1 kgf/cm ² , 185.65 psi}[250rpm] Minimum: 896 kPa {9.14 kgf/cm ² , 129.96 psi}[250rpm] Maximum difference between cylinders: 196.1 kPa {2.0 kgf/cm ² , 28.5 psi}
Cylinder head bolt length	Standard: 144.7—145.3 mm {5.697—5.720 in} Maximum: 146 mm {5.74 in}
Front oil seal press-in amount	0—0.5 mm {0—0.019 in}
OCV resistance	6.9—7.9 ohms [20°C {68°F}]
Ignition timing	Approx. BTDC 10°
Idle speed	No load: 650—750 rpm Electrical load on*1: 650—750 rpm P/S operation: 650—750 rpm A/C operation: 700—800 rpm
Idle mixture	HC concentration: Within the regulation CO concentration: Within the regulation
Engine oil capacity (approx. quantity)	Oil replacement: 5.3 L {5.6 US qt, 4.7 Imp qt} Oil and oil filter replacement: 5.7 L {6.0 US qt, 5.0 Imp qt} Total (dry engine): 6.4 L {6.8 US qt, 5.6 Imp qt}
Oil pressure (reference value) [oil temperature: 100 °C {212 °F}]	297—551 kPa {3.03—5.61 kgf/cm ² , 43.1—79.9 psi} [3,000 rpm]
Engine coolant capacity (approx. quantity)	7.5 L {7.9 US qt, 6.6 Imp qt}
Cooling system cap valve opening pressure	135—155 kPa {1.38—1.58 kgf/cm ² , 19.6—22.4 psi}
Thermostat initial-opening temperature	80—84 °C {176—183 °F}
Thermostat full-open temperature	97 °C {207 °F}
Thermostat full-open lift	More than 8.0 mm {0.31 in}
Fuel line pressure	410—490 kPa {4.2—4.9 kgf/cm ² , 60—71 psi}
Fuel pump hold pressure	More than 230 kPa {2.3 kgf/cm ² , 33 psi}
Fuel injector resistance	1.0—1.2 ohms [20 °C {68 °F}]
Battery electrolyte specific gravity [20 °C {68 °F}]	1.22—1.29
Battery load test current	55D23L (48): 180 A 80D26L (55): 195 A
Battery back-up current	Vehicles with immobilizer system: 25—45 mA Vehicles without immobilizer system: 30 mA or less
Battery slow charge current	55D23L (48): 4.5—5.5 A 80D26L (55): 5.5—6.5 A
Battery quick charge current [30 min]	55D23L (48): 30 A 80D26L (55): 35 A
Generator standard voltage [IG-ON]	Terminal B: B+ Terminal P: Approx. 1 V or less Terminal D: Approx. 0 V
Generator standard voltage [Idle, 20 °C {68 °F}]	Terminal B: 13—15 V Terminal P: Approx. 3—8 V Terminal D: Turn the electrical loads (headlights, blower motor, rear window defroster) on and verify that the voltage reading increases.
Generator generated current minimum value	70 % of the nominal output current (nominal output current: 110 A) [Ambient temp. 20 °C {68 °F}, voltage 13.0—15.0 V, both engine and generator are hot]
Generator rotor resistance (between slip rings) [20 °C {68 °F}]	2.0—2.3 ohm
Generator brush length	Standard: 22.5 mm {0.89 in} Minimum: 5.0 mm {0.20 in}
Generator brush spring force	Standard: 4.1—5.3 N {0.42—0.54 kgf, 0.92—1.19 lbf} Minimum: 1.7 N {0.17 kgf, 0.38 lbf}

Item	Specification
Firing order	1-3-4-2 (all cylinders independent firing)
	CYLINDER No. 
Spark plug type	L3K9 18 110A, L3Y3 18 110
Spark plug gap	0.7—0.8 mm {0.028—0.031 in}
Spark plug resistance [25°C {77 °F}]	3.0—7.5 kilohms
Starter no-load test voltage	11 V
Starter no-load test current	90 A or less
Starter pinion gap	0.5—2.0 mm {0.02—0.07 in}
Starter armature runout	0.05 mm {0.002 in} max.
Starter commutator diameter	Standard: 29.4 mm {1.16 in} Minimum: 28.8 mm {1.13 in}
Segment groove depth of starter commutator	Standard: 0.4—0.6 mm {0.016—0.023 in} Minimum: 0.2 mm {0.008 in}
Starter brush length	Standard: 12.3 mm {0.48 in} Minimum: 7.0 mm {0.28 in}
Starter brush spring force	Standard: 18.3—24.9 N {1.87—2.53 kgf, 4.12—5.59 lbf} Minimum: 5.9 N {0.6 kgf, 1.3 lbf}

*1 : When the following electrical loads are on: Headlights, rear defroster, cooling fan No.1, cooling fan No.2, and the blower motor (2-step or more.)

Recommended engine oil

Item	Specifications		
	Europe		Except Europe
Grade	API SL, ACEA A3/A5	API SL/SM, ACEA A3/A5	API SG/SH/SJ/SL/SM or ILSAC GF-2/GF-3/GF-4
Viscosity (SAE)	5W-30		40, 30, 10W-30, 10W-40, 10W-50, 20W-40, 15W-40, 20W-50, 15W-50, 5W-30, 5W-40
Remarks	Mazda genuine Dexelia oil e.g.	—	—