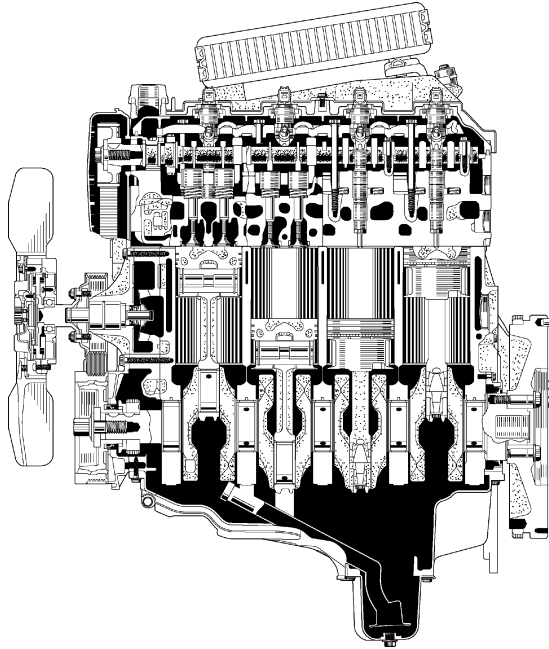


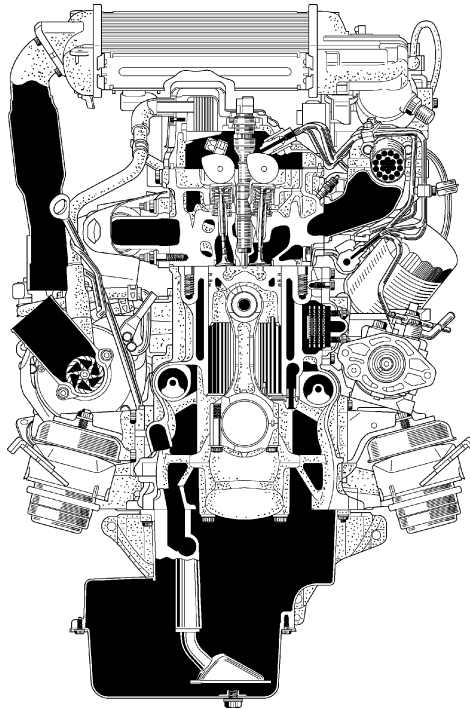
1KD-FTV ENGINE

■ DESCRIPTION

The 1KD-FTV TOYOTA D-4D (Direct Injection, 4-Stroke Common-Rail Diesel Engine) is a 3.0-liter, inline 4-cylinder, 16-valve DOHC with intercooler turbocharged diesel engine. It is provided on the model for Europe. Based on the 1KD-FTV engine of the previous model, various parts of this engine have been revised to enhance high performance, clean emissions, low noise, and low vibration.



233EG01



233EG02

► Engine Specifications ◀

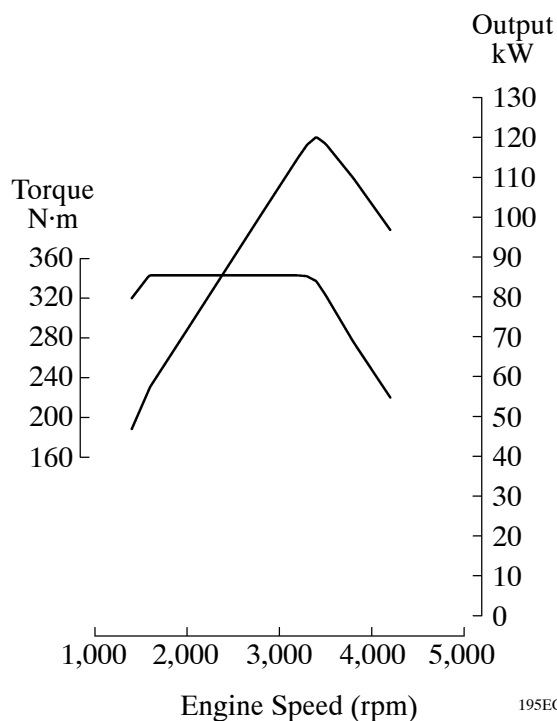
Engine Type			1KD-FTV	
Model			New	Previous
No. of Cyls. & Arrangement			4-Cylinder, In-Line	←
Valve Mechanism			16-Valve DOHC, Gear & Belt Drive	←
Combustion Chamber			Direct Injection Type	←
Manifolds			Cross-Flow	←
Fuel System			Common-Rail Type	←
Displacement		cm ³ (cu.in.)	2982 (182.0)	←
Bore × Stroke		mm (in.)	96.0 × 103 (3.78 × 4.06)	←
Compression Ratio			18.4 : 1	←
Max. Output		(EEC)	120 kW @ 3400 rpm	←
Max. Torque		(EEC)	343 N·m @ 1600 ~ 3200 rpm	←
Valve Timing	Intake	Open	2° BTDC	←
		Close	37° ABDC	←
	Exhaust	Open	45° BBDC	←
		Close	0° ATDC	←
Firing Order			1 - 3 - 4 - 2	←
Fuel Cetan Number			48 or more	←
Engine Service Mass* ¹ (Reference) kg (lb)			Approx. 260 (573)* ² Approx. 272 (599)* ³	←
Oil Grade			CF 5W-30	CF-4 10W-30
Emission Regulation			European STEP-III	←

*1: Weight shows the figure with the oil and water fully filled.

*2: Without A/C system and power heater model.

*3: With A/C system and power heater model.

► Performance Curve ◀



► Valve Timing ◀

