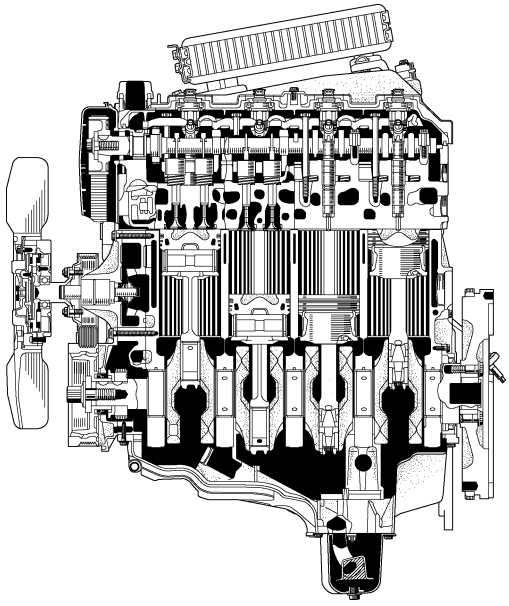
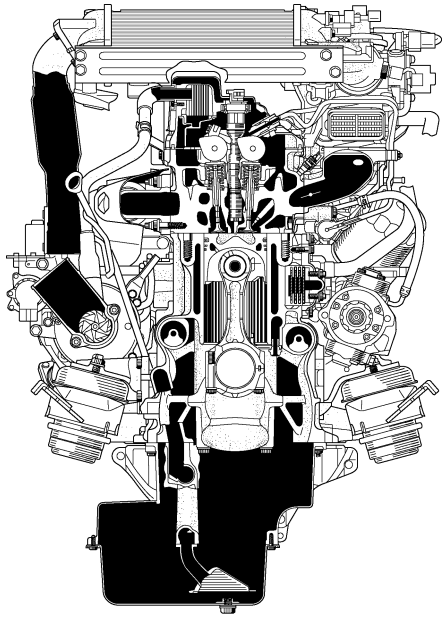
■1KD-FTV ENGINE

1. General

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 Land Cruiser, various parts of this engine have been revised to enhance high performance, clean emissions, low noise, and low vibration.



276PD16



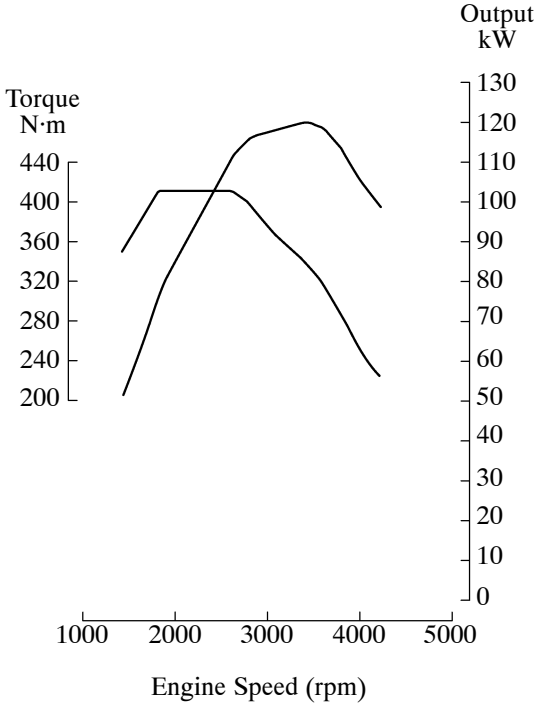
276PD17

▶ Engine Specifications ◀

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			17.9 : 1	18.4 : 1
Max. Output (EEC)			122 kW @ 3400 rpm	←
Max. Torque (EEC)			410 N·m @ 1800 ~ 2600 rpm	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 (Reference) kg (lb)			Approx. 260 (573)	Approx. 260 (573)*1 Approx. 272 (599)*2
Oil Grade			CF 5W-30	←
Emission Regulation			EURO III	←

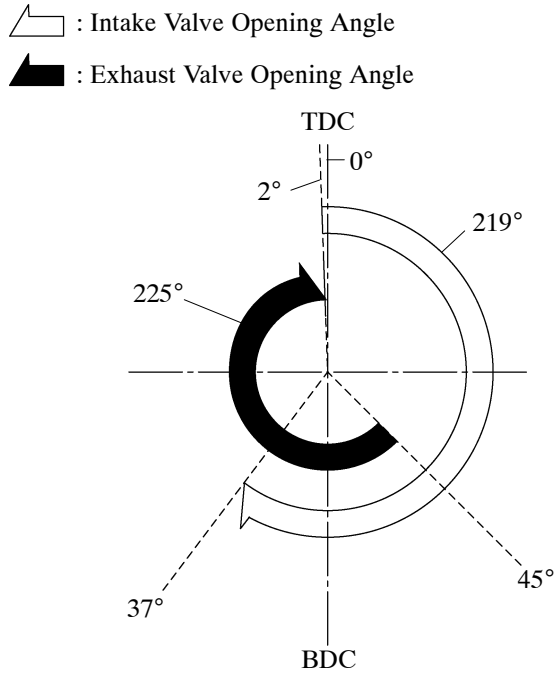
*1: without A/C system and power heater model
*2: with A/C system and power heater model

▶ Performance Curve ◀



276PD18

▶ Valve Timing ◀



233EG03