1VD-FTV ENGINE

■ DESCRIPTION

- A 1VD-FTV engine compliant with EURO 5 emission regulations is used on models for Europe.
- On the models compliant with EURO 5 emission regulations, the following items are used:
  - Piezo Type Injector Assembly
  - Exhaust Fuel Addition Injector Assembly
  - Diesel Particulate Filter (DPF)
  - Catalyst Support Control
  - Fuel Pressure Discharge Valve
- On the models compliant with EURO 5 emission regulations, the turbocharger control has been changed. The turbo motor driver has been discontinued and the ECU controls the actuator directly.
- In addition, the fuel cooler is not provided on the models compliant with EURO 5 emission regulations.

▶ Engine Specifications for Models Compliant with EURO 5 Emission Regulations ◀

No. of Cyls. & Arrangement			8-cylinder, V Type
Valve Mechanism			32-valve, DOHC, Chain & Gear Drive
Combustion Chamber			Direct Injection Type
Manifolds			Cross-flow
Fuel System			Common-rail Type
Displacement			4461 cm^3 (272.2 cu. in.)
Bore × Stroke			86.0 × 96.0 mm (3.39 × 3.78 in.)
Compression Ratio			16.8 : 1
Max. Output [ECE]			200 kW @ 3600 rpm
Max. Torque [ECE]			650 N·m @ 1600 to 2800 rpm
Valve Timing	Intake	Open	2° BTDC
		Closed	17° ABDC
	Exhaust	Open	51° BBDC
		Closed	2° ATDC
Firing Order			1 – 2 – 7 – 3 – 4 – 5 – 6 – 8
Fuel Cetane Number			48 or higher
Emission Regulation			EURO 5
Engine Service Mass* (Reference)			330 kg (728 lb)

*: The figure shown is the weight of the part without coolant and oil.

▶ Performance Curve for Models Compliant with EURO 5 Emission Regulations ◀

