

■ FEATURES OF 1KD-FTV AND 2KD-FTV ENGINES

The 1KD-FTV and 2KD-FTV engines have achieved the following performance through the adoption of the items listed below.

- (1) High performance and reliability
- (2) Low noise and vibration
- (3) Lightweight and compact design
- (4) Good serviceability
- (5) Clean emission and fuel economy

Item		(1)	(2)	(3)	(4)	(5)
Engine Proper	A cylinder head cover made of plastic is used.		○	○		
	2 balance shaft is used.		○			
	Piston provided with combustion chamber is used in conjunction with the adoption of direct injection.	○				○
	The passage for the EGR is provided in the cylinder head.			○		○
Valve Mechanism	A shim-less type valve lifter is used.	○			○	
Cooling System	A pressurized reservoir tank is used.	○				
Intake and Exhaust System	An intake shutter valve (throttle valve), which is actuated by a torque motor (rotary solenoid type), and an airflow meter are used.	○	○			○
	Swirl control valve is used.	○	○			○
	A variable nozzle vane type turbocharger is used.	○				○
	Air cooled type turbocharger is used.			○		
	An inter cooler is used.	○				○
	Oxidation catalytic converter is used.					○
Fuel System	HP3 type supply pump is used.	○	○	○		
	A common rail type fuel injection system is used.	○	○			○
	Injector is provided in the bore center.	○				○
	Compensation value and QR code printed injector is used.	○				○
	Fuel cooler has been adopted.	○				
	A fuel filter, in which the fuel filter element alone can be replaced, has been adopted.				○	
	A fuel filter warning switch that detects the clogging of the fuel filter has been adopted.				○	
Charging System	A segment conductor type alternator is used.	○		○		
Starting System	Planetary reduction type with interpolar magnet is used.			○		
Engine Control System	An EGR valve position sensor is used.					○
	The no-contact sensor is used in the accelerator pedal position sensor and intake shutter valve position sensor.	○				
	A pilot injection control system is used.	○	○	○		