■ FEATURES OF 1G-FE ENGINE

Features of the 1G-FE engine are listed below.

Item	Features
High Performance and Economy	● A taper squish configuration has been adopted to improve the combustion efficiency. ● An upright intake port has been adopted to improve the intake efficiency. ● The VVT-i (Variable Valve Timing-intelligent) system is used to improve fuel economy, engine performance and reduce exhaust emissions. ● ACIS (Acoustic Control Induction System) is used to deliver high power output in all engine speed ranges. ● A high compression ratio of 10.0 : 1 is used.
Light wight and Compact Design	● Cylinder head made of aluminum alloy. ● The materials and the shapes of the pistons and connecting rods have been optimized for weight reduction. ● The intake manifold is new made of plastic for weight reduction. Furthermore, the intake manifold, air connector, and the vacuum tank have been integrated to achieve a lightweight and compact design.
Low Noise and Low Vibration	● The air cleaner case has been mounted directly above the engine to reduce the amount of noise radiated from the engine proper. ● A highly rigid crankshaft with 12-balance weights is used. ● The materials and the shapes of the pistons and connecting rods have been optimized for weight reduction, thus realizing reduced vibration and noise.
Good Serviceability	● An auto-tensioner with idler pulley is provide a for timing belt. ● The DIS (Direct Ignition System) makes ignition timing adjustment unnecessary. ● The engine ECU has been provided in the engine compartment to improve serviceability such as during the removal and reinstallation of the engine.
Clean Emissions	● 4-hole type fuel injectors have been adopted to improve the atomization of fuel. ● A fuel returnless system has been adopted to reduce evaporative emissions. ● A blowby gas ventilation system, which consists of a PCV (Positive Crankcase Ventilation) valve that prevents the blowby gas from being released to the atmosphere, has been adopted. ● The exhaust manifold and the catalyst have been integrated to improve the warm-up performance of the TWC (Three-Way Catalytic Converter).