ENGINE

■ 1RZ-AND 1RZ-E ENGINES

The newly-developed 1RZ and 1RZ-E engines are an in-line 4-cylinder, 2.0-liter OHC engine.
The valve following characteristics of the valve mechanism are good.
This engine features camshaft direct drive OHC and intake and exhaust ports laid out in a cross flow pattern which results in high intake efficiency. Thus, this engine gives both high performance and good fuel economy. Based on the 1RZ engine, the 1RZ-E engine uses the engine control system.

■ 2RZ-FE, 3RZ-F AND 3RZ-FE ENGINES

- The newly developed 2RZ-FE engine is an in-line 4-cylinder, 2.4-liter, 16-valve DOHC engine. This engine offers high performance and low fuel consumption while complying with the stringent exhaust emission control regulations. A high level of reliability also makes this engine suitable for commercial vehicle applications.
- The newly-adopted 3RZ-F and 3RZ-FE engines are an in-line 4-cylinder, 2.7-liter, 16-valve DOHC engine. It provides increased displacement over the 2RZ-FE engine on which it is based, and higher performance. The 3RZ-FE engine has adopted a balance shaft to improve its quiet operation.
- The 2RZ-FE and 3RZ-FE engines have adopted an M-OBD (Multiplex On-Board Diagnostic) system, which performs fault diagnosis at a higher level of precision than in the previous models.

■ 2L AND 3L ENGINES

Although the performance of the 2L and 3L engines remains the same, resonaters have been added to the intake air pipe to reduce noise.

■ 2L-T ENGINE

The newly adopted 2L-T engine is a high-performance turbocharged version that is based on the 2L engine. In addition to the same basic construction and operation found in the 2L-T engine on the 4Runner (LN130 model), this 2L-T engine provides an injection pump with optimized fuel injection characteristics that offer higher output while reducing exhaust emissions.

■ 5L ENGINE

The newly-developed 5L engine is a in-line 4-cylinder, 3.0-liter OHC engine.
Based on the 3L engine, the 5L engine provides a larger cylinder displacement by increasing the cylinder bore in order to achieve improved engine performance.