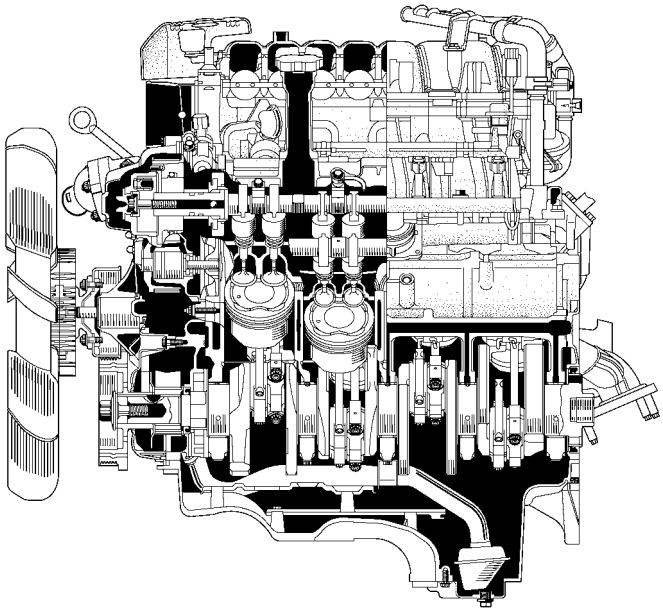
# ENGINE

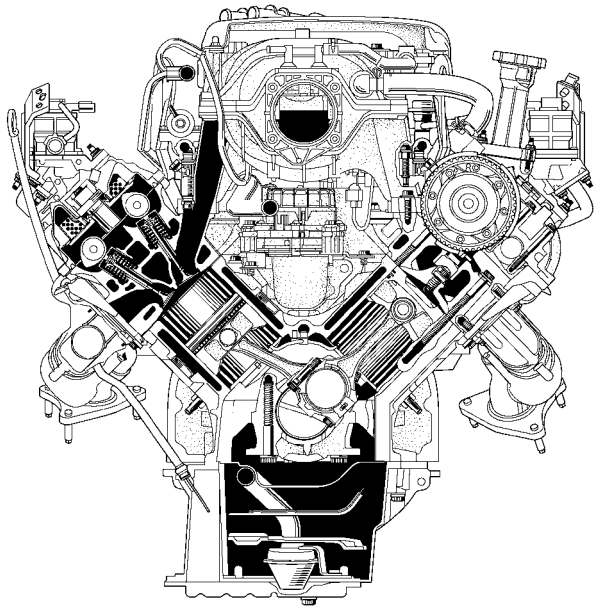
## 2UZ-FE ENGINE

### ■DESCRIPTION

The 2UZ-FE engine is a 4.7-liter, 32-valve DOHC V8. This engine uses the VVT-i (Variable Valve Timing-intelligent) system, DIS (Direct Ignition System), ACIS (Acoustic Control Induction System), ETCS-i (Electronic Throttle Control System-intelligent), and air injection system. These control functions achieve stable engine performance, fuel economy, and clean emissions.



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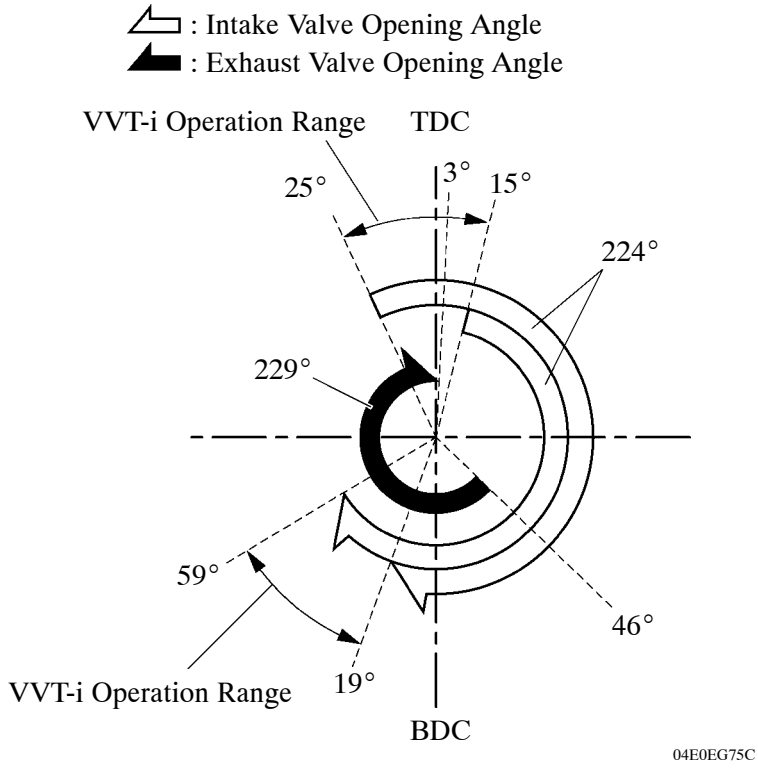
**▶ Engine Specifications ◀**

| | | | |
|---|---|---|---|
| No. of Cyls. & Arrangement | | | 8-cylinder, V Type |
| Valve Mechanism | | | 32-valve DOHC, Belt & Gear Drive (with VVT-i) |
| Combustion Chamber | | | Pentroof Type |
| Manifolds | | | Cross-flow |
| Fuel System | | | SFI |
| Ignition System | | | DIS |
| Displacement $cm^3$ (cu. in.) | | | 4664 (284.5) |
| Bore × Stroke mm (in.) | | | 94.0 × 84.0 (3.70 × 3.31) |
| Compression Ratio | | | 10.0 : 1 |
| Max. Output*1 [SAE-NET] | | | 206 kW @ 5400 rpm<br>(276 HP @ 5400 rpm) |
| Max. Torque*1 [SAE-NET] | | | 426 N·m @ 3400 rpm<br>(314 ft·lbf @ 3400 rpm) |
| Valve Timing | Intake | Open | 25° BTDC to 15° ATDC |
| | | Close | 19° ABDC to 59° ABDC |
| | Exhaust | Open | 46° BBDC |
| | | Close | 3° ATDC |
| Firing Order | | | 1-8-4-3-6-5-7-2 |
| Oil Grade | | | ILSAC |
| Octane Rating | | | 87 or higher |
| Research Octane Number (RON) | | | 91 or higher |
| Tailpipe Emission Regulation | | | LEVII-ULEV, SFTP |
| Evaporative Emission Regulation | | | LEVII, ORVR |
| Engine Service Mass*2 (Reference) kg (lb) | | | 237 (523) |

*1: Maximum output and torque ratings are determined by revised SAE J1349 standard.
*2: The figure shown is the weight of the part without coolant or oil.

EG

**▶ Engine Specifications ◀**




**▶ Performance Curve ◀**

