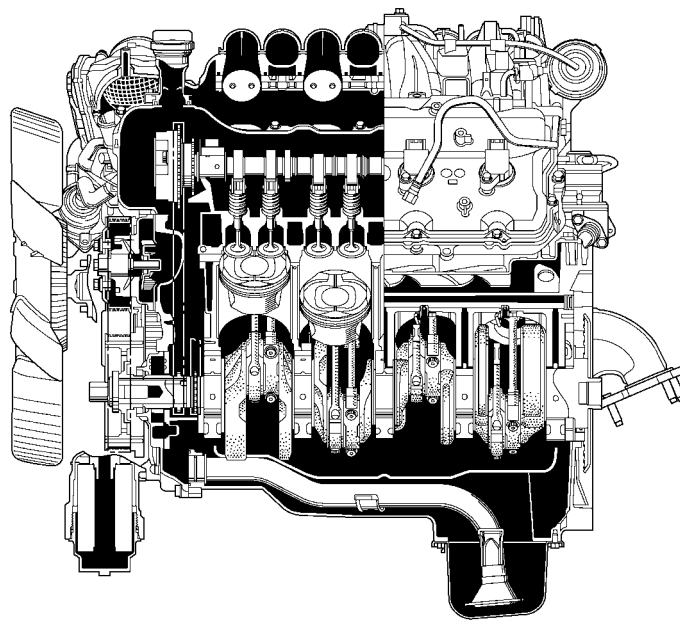
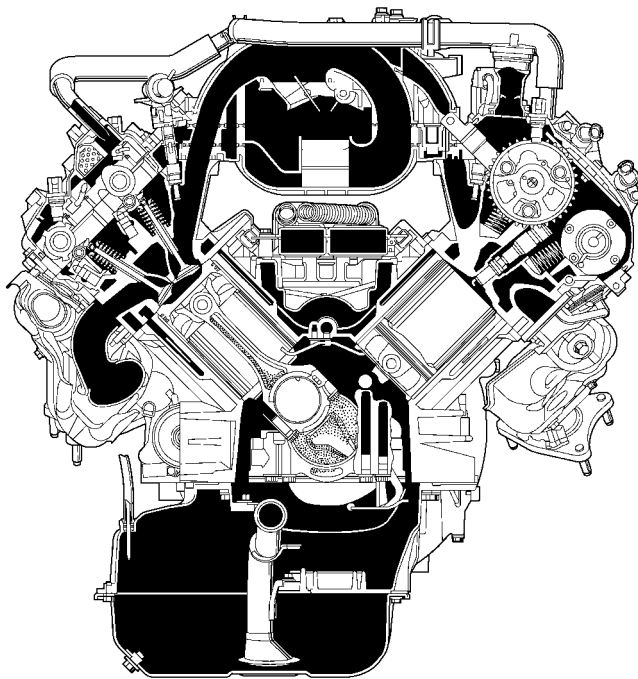


ENGINE**3UR-FE ENGINE****■ DESCRIPTION**

The 3UR-FE engine is a 5.7-liter, 32-valve DOHC V8. This engine uses the dual 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 improved engine performance, fuel economy, and clean emissions.



04E1EG01Z



04E1EG02Z

► Engine Specifications ◀

No. of Cyls. & Arrangement		8-Cylinder, V Type	
Valve Mechanism		32-Valve DOHC, Chain Drive (with dual VVT-i)	
Combustion Chamber		Pentroof Type	
Manifolds		Cross-Flow	
Fuel System		SFI	
Ignition System		DIS	
Displacement		cm ³ (cu. in.)	5663 (345.6)
Bore × Stroke		mm (in.)	94.0 × 102.0 (3.70 × 4.02)
Compression Ratio		10.2 : 1	
Max. Output (SAE-NET)* ¹		284 kW @ 5600 rpm (381 HP @ 5600 rpm)	
Max. Torque (SAE-NET)* ¹		544 N·m @ 3600 rpm (401 ft·lbf @ 3600 rpm)	
Valve Timing	Intake	Open (BTDC)	- 2° to 58°
		Close (ABDC)	70° to 10°
	Exhaust	Open (BBDC)	62° to 32°
		Close (ATDC)	0° to 30°
Firing Order		1-8-7-3-6-5-4-2	
Oil Grade		ILSAC	
Octane Rating		87 or higher	
Research Octane Number (RON)		91 or higher	
Emission Regulation		CARB* ³	
		Tailpipe	LEVII-ULEV, SFTP
		Evaporative	LEVII, ORVR
Engine Service Mass* ² (Reference)		kg (lb)	219.3 (483.5)



*¹: Maximum output and torque rating is determined by revised SAE J1349 standard.

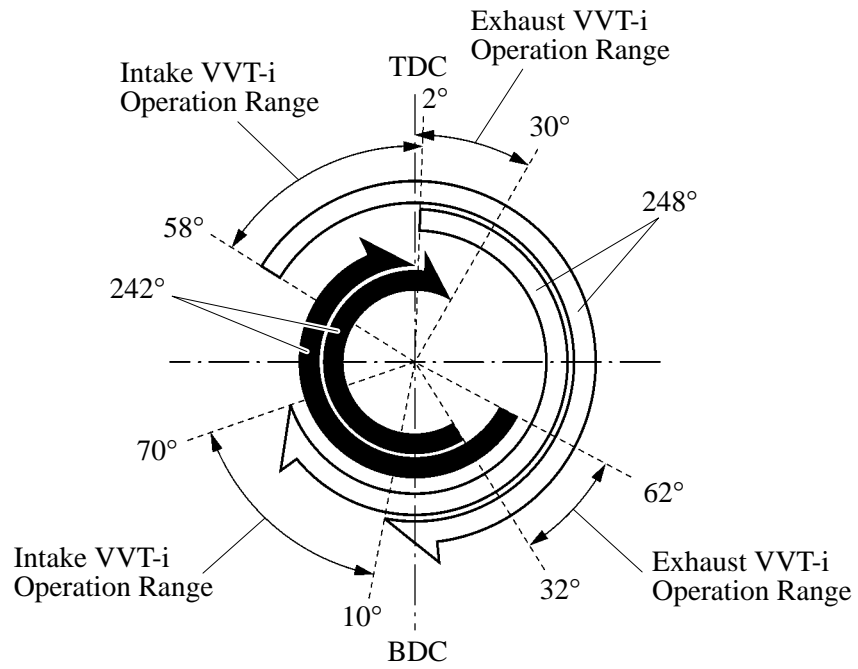
*²: The figure shown is the weight of the part without coolant and oil.

*³: CARB (California Air Resources Board)

*⁴: EPA (Environmental Protection Agency)

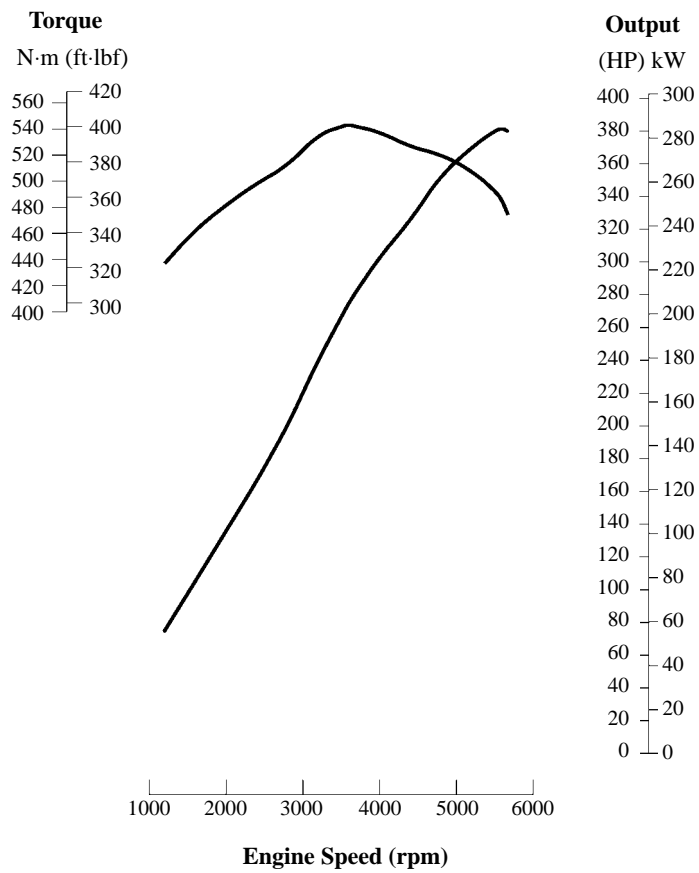
► Valve Timing ◀

 : Intake Valve Opening Angle
 : Exhaust Valve Opening Angle



04E1EG03C

► Performance Curve ◀



04E1EG05C