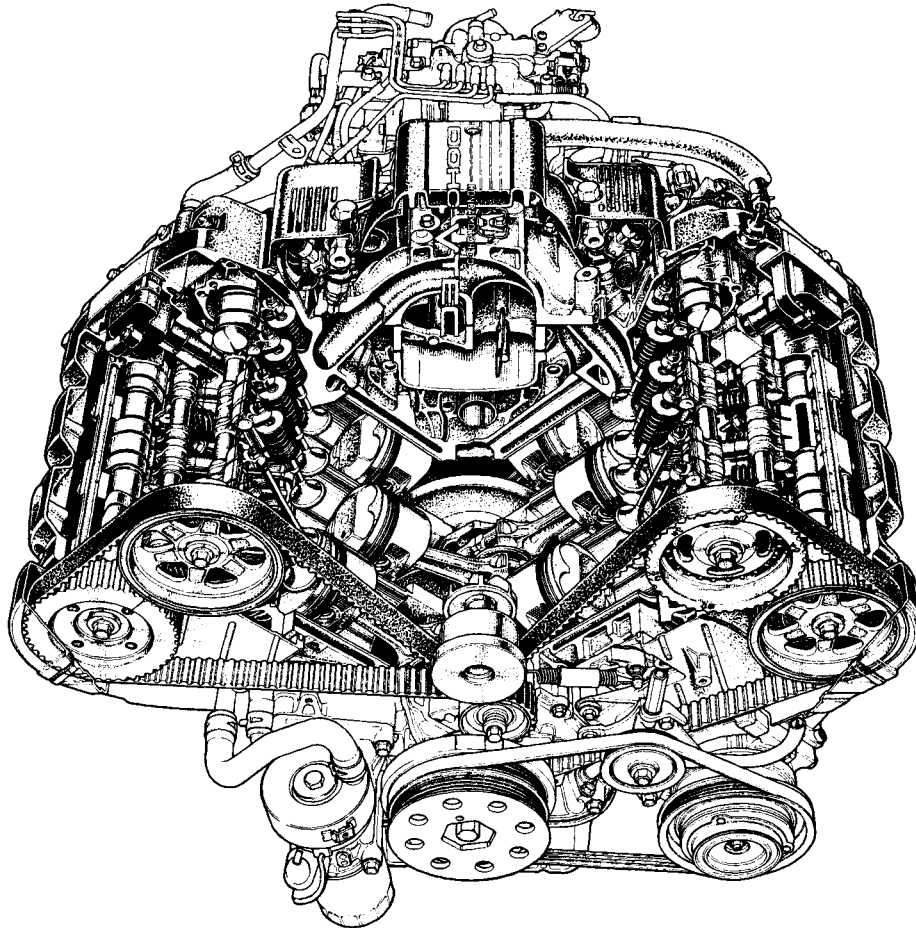


## Outline

### Description

This engine is a 2,977 cm<sup>3</sup> (181.6 cu-in) DOHC mid-ship unit having 6 cylinders of 90° —V configuration; it is water cooled and equipped with a center plug type pent roof combustion chamber. It is specified for unleaded fuel and uses a \*PGM-FI system. This engine incorporates a new mechanism called Honda Variable Valve Timing and Valve Lift Electronic Control System (VTEC). This mechanism, the world's first, allows the timing and lift of the intake and exhaust valves to be changed simultaneously. The engine also includes a new electronically-controlled intake manifold system that can change the volume of the intake chamber.



\* PGM-FI system: The PGM-FI system on this model is a sequential multiport fuel injection system.



This engine has the following new features.

- **VTEC**; High output and a broad power band is achieved through control of low-speed and high-speed valve operation by the Engine Control Module (ECM).  
(Two knock sensors are used to detect octane level of the fuel.)
- **Titanium connecting rods** ; Accomodate high rotation speed and high output. Titanium material of light weight and high strength is used for the connecting rods.  
(Strength is at the same level as iron.)  
(Weight is about 30% lighter than iron.)
- **New mechanism to the intake system**; Increased low and middle speed torque and higher output can be achieved by switching the chamber volume of the intake manifold according to engine speed. This is electronically-controlled.
- **Cooling system for the mid-ship engine:**
  - Radiator located in front compartment (An aluminum alloy radiator and pipes made of aluminum alloy)
  - Engine room cooling fan
  - Expansion tank
- **The cylinder block is highly rigid with deep water jackets.**
- **In order to achieve lighter weight, magnesium is used for the following parts:**
  - Cylinder head cover
  - Intake manifold cover
  - Intake manifold chamber

#### Major Specifications

Type	Water-cooled V6—90° Cross Flow
Displacement	2,977 cm <sup>3</sup> (181.6cu-in)
Bore x Stroke	90 x 78 mm (3.54 x 3.07 in)
Compression Ratio	10.2
Cam, Valve Mechanism	Dual Overhead Camshafts, VTEC
Valve Train	Belt Driven
Fuel Supply System	Sequential Multiport Fuel Injection (SFI)