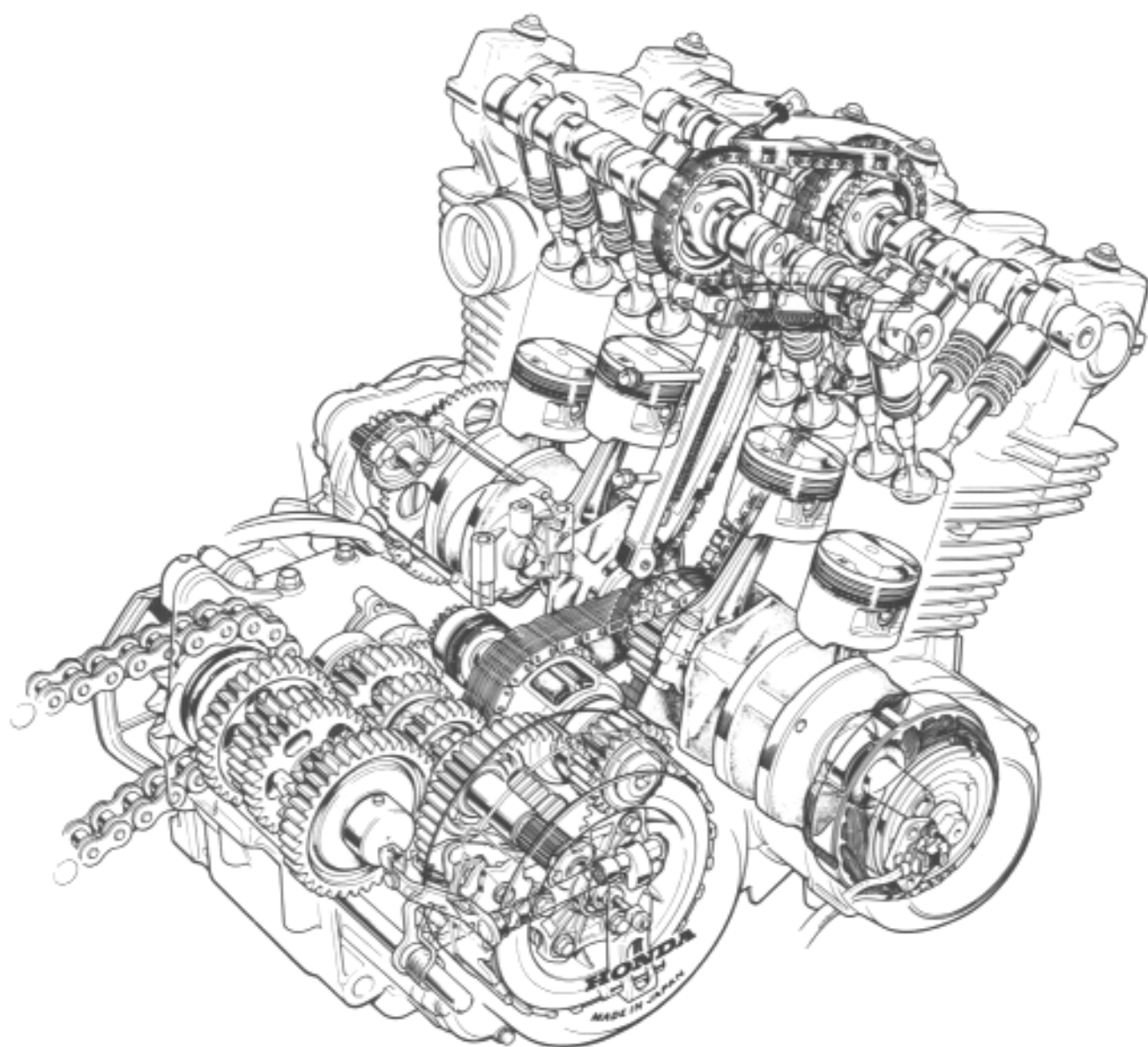




ENGINE CONSTRUCTION





DUAL CAM CHAINS

Dual cam chains drive the camshafts. Drive is transmitted from the crankshaft to the exhaust camshafts and from there to the intake camshafts. This eliminates a diagonal chain path through the rear of the engine, reducing the distance between the carburetors and cylinders.

The cam chains are the silent inverted tooth type.

Each chain has a guide. Chain tensioners are the slipper type.

16 VALVES

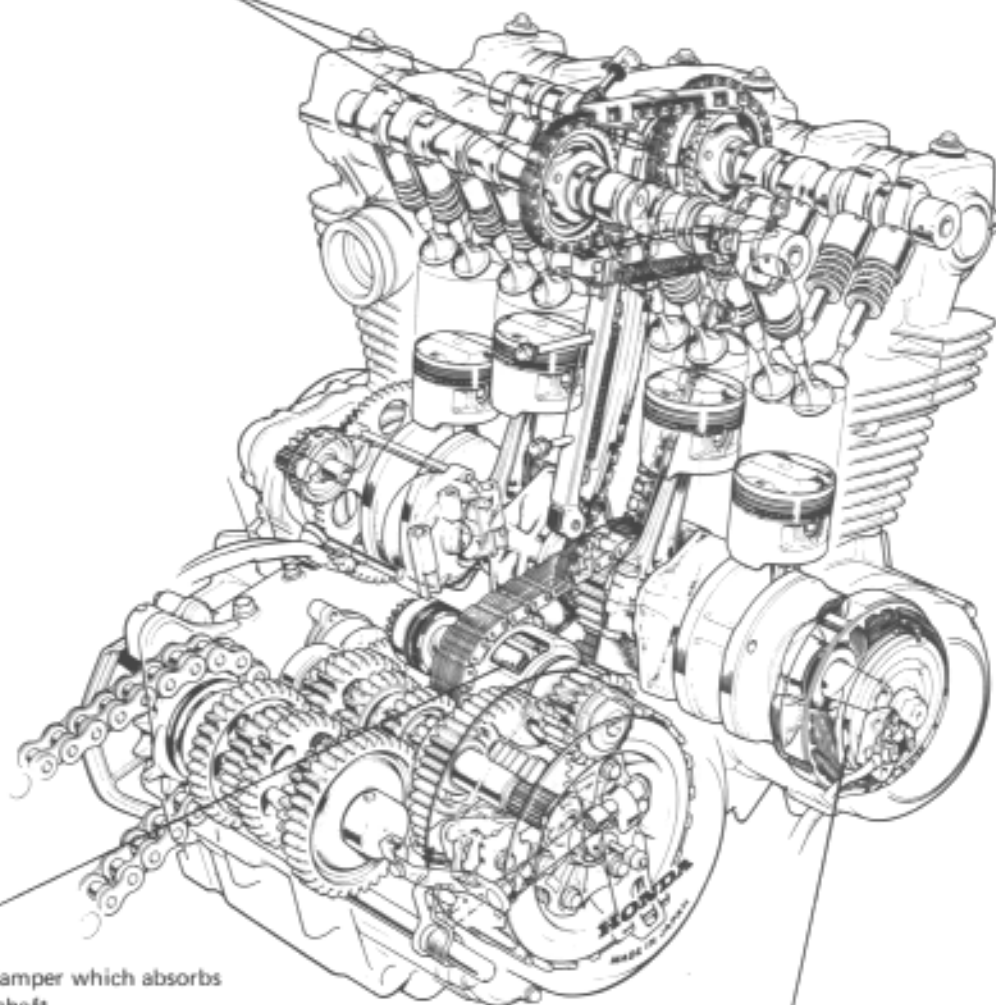
Each cylinder has two intake and two exhaust valves. The arrangement ensures effective breathing at high speed without valve float. Four valves instead of two allow a large overall port areas with a low reciprocating weight for each valve spring.

PRIMARY SHAFT

The primary shaft has a damper which absorbs the shock from the crankshaft.

A.C. GENERATOR

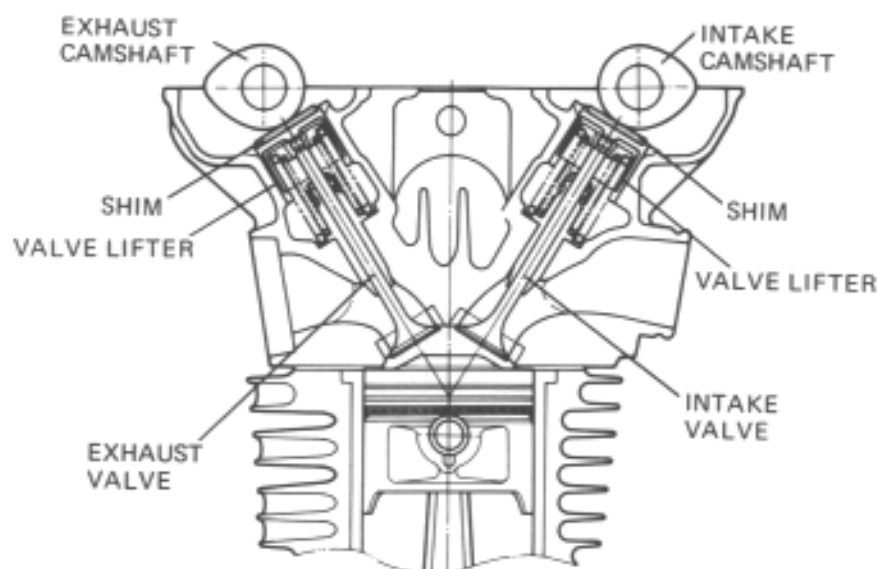
The A. C. generator and ignition pulser assembly are mounted on the crankshaft. This makes the ignition system maintenance-free.





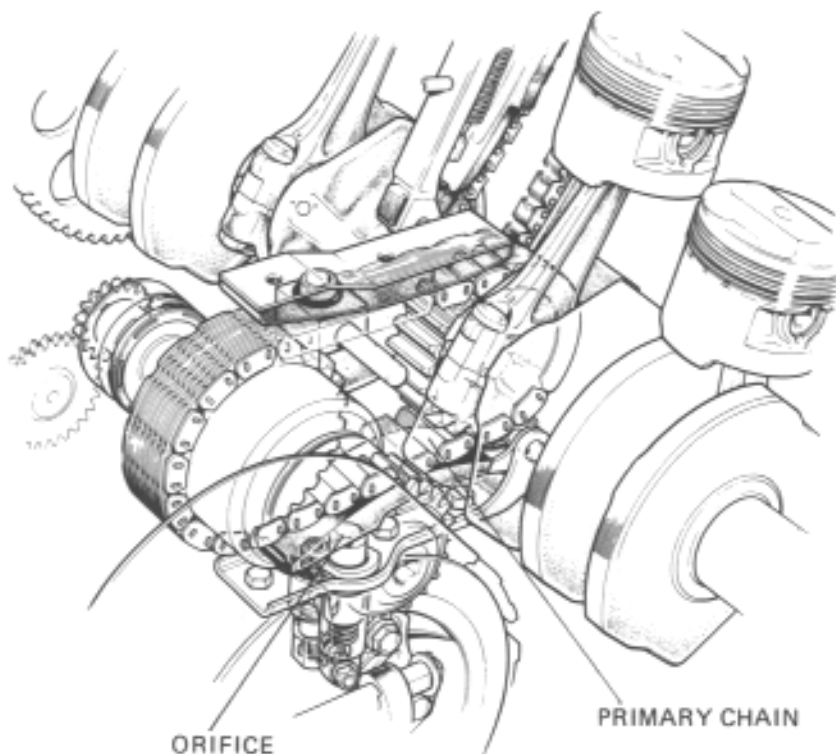
VALVE MECHANISM

The valves are operated by the cams through the valve lifters. The shims can be removed and installed easily without removing the camshafts by pushing down on the lifters with a special tool.



OIL DAMPER TYPE PRIMARY CHAIN TENSIONER

Primary chain tension is controlled by an oil dampened chain tensioner. It consists of a fluid valve using oil control orifice, a spring and a tension bar. Oil in the fluid valve compensates for cavitation, assuring positive damper action at all times.

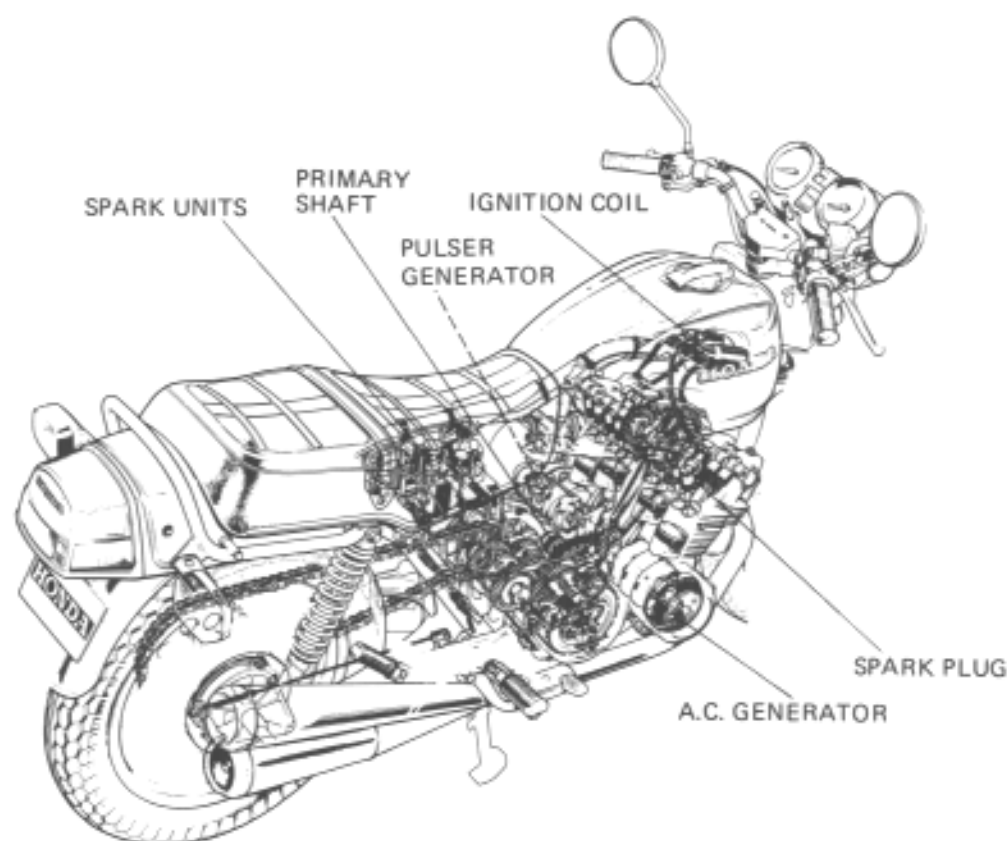




TRANSISTORIZED IGNITION

The engine uses a transistorized ignition. A pulser generator and transistorized spark unit supply current to the crank circuit. The system is free from problems that occur in mechanical breaker systems. It produces stable secondary energy and eliminates periodic adjustments and maintenance services. There are two independent systems; one for 1 & 3 and one for 2 & 4 cylinders. The generator rotor is connected to the crankshaft so they turn as a unit as the shaft rotates. Two generating coils are spaced evenly on the base plate, 180 degrees apart.

When the rotor turns, pulses are generated as it passes over the coils. Adjusting timing for 1 & 3 cylinders automatically adjust the other cylinders.





MEMO