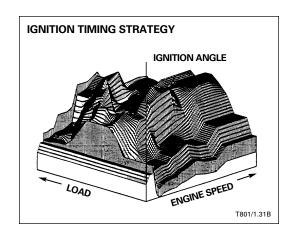
Ignition Primary Control

Ignition timing is controlled primarily as a function of engine load and speed. Engine load is sensed by the mass air flow sensor (MAFS) located in the engine air intake before the throttle housing. Engine speed is sensed by a crankshaft position sensor (CKPS) located behind the engine damper. The ECM processes the inputs from the MAFS and the CKPS and accesses ignition timing from the ignition timing strategy.

Six individual "on-plug" ignition coils are located above each spark plug. The ECM provides switching for each primary circuit. The correct firing sequence and timing of the six individual on-plug ignition coils is determined by the ECM from the cylinder synchronization input provided by the camshaft position sensor (CMPS) (initial learning at engine start) and the crankshaft position sensor (CKPS). Refer to the CMPS description on page 27 and the CKPS description on page 26.



NOTES

