

ABSTRACT

Apparatus is provided for diagnosing an electronically fuel injected engine equipped with sensors connected to an on-board microcomputer. The apparatus uses a standard personal or portable computer and a connector for electrical connection to the sensors and the on-board computer. An interface device is connected between the connector and the computer to enable the computer to read the values of the operational parameters of the engine as detected by the sensors, and to perform a diagnostic software comparison of the measured values with predetermined values or ranges. The interface device is switchable to a selected sensor or the on-board computer under software control from the computer, and includes a multiple mode measurement device which is also selectively switched to a desired measurement mode by the computer. The computer is then able to selectively measure the operational parameters of the engine and test for correct operation, and display the appropriate diagnostic or tutorial instructions for fault location and rectification. The computer is also able to feed data to the on-board computer for testing same.

Figure 1

