

# Ignition System

## Spark Plugs

Double platinum spark plugs are now fitted to 4.0L N/A engines and have a service life of 160,000km (100,000m). See engine specification.

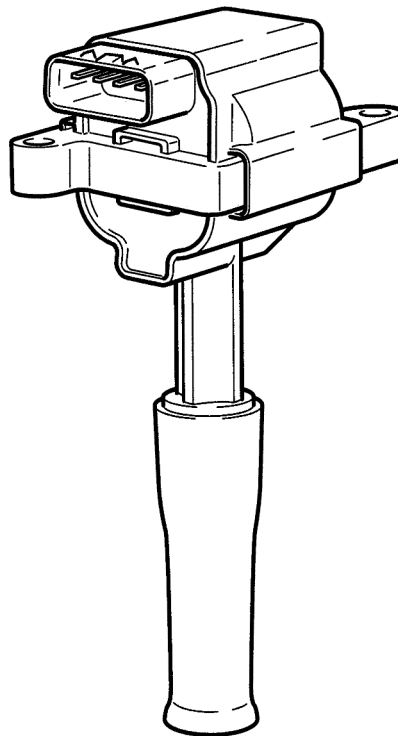
## Coil-on-plug Units

A new type coil-on-plug unit, which incorporates its own ignition control module, replaces the previous coil only type and the two separate drive modules. The new units are of integral, encapsulated construction with a fixed 4-pin connector.

## Coil-on-plug Operation

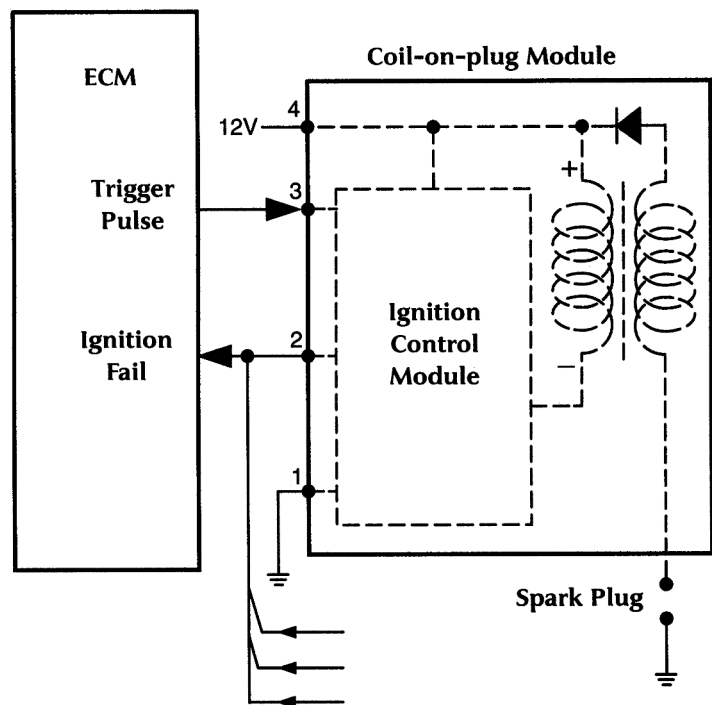
The ignition control module is triggered directly from the ECM and drives the coil primary circuit, controlling current amplitude, switching point and energisation period. Each ignition control module also provides a monitor output to the ECM. When an ignition trigger signal is received, an acknowledge pulse is sent to the ECM if the current drive to the coil primary is satisfactory. This pulse is initiated when the current reaches 2 Amps and is terminated at 4 Amps. If the trigger pulse is not received or the coil current does not rise to 2 Amps, the monitor line will remain at logic high, signalling an ignition failure to the ECM. Two ignition monitor inputs are used on the ECM as before, but with each group of four monitor lines wire spliced together.

COIL-ON-PLUG IGNITION UNIT



J.303.1226

COIL-ON-PLUG IGNITION SCHEMATIC



J.303.1227