

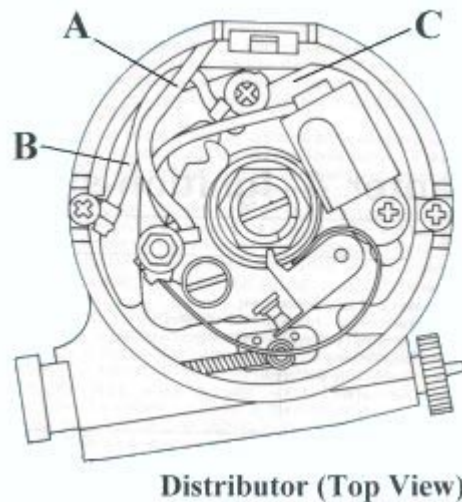
Wiring Insulation

An Undesirable Problem

By Bob Ritchie

The wiring leads inside distributors are vital to engine operation and should not be overlooked during routine maintenance checks. The internal portion of the lead connecting the coil to the contact points (A) and the internal earth lead (B) connecting the distributor case to the base plate (C) are subject to fatigue failure and are easy to ignore even when changing points.

The base plate constantly moves back and forth a few degrees as mechanical and vacuum advance/retard conditions change. As a result both leads are subject to constant movement. The original leads were cloth covered and composed of very fine strands of wire. These were very flexible and did not interfere with the motion of the base plate.



But these leads can fail and particularly the lead to the points connection post will probably fatigue and will fail at the connection to the vertical post. Failure will invariably be during driving - there is no warning and the car stops dead in its tracks. Check the condition of the leads and don't let them deteriorate to near failure. Do not replace them with PVC insulated leads as PVC is too stiff and becomes stiffer with age. PVC insulated cable will interfere with the motion of the base plate and the lead can fail fairly quickly due to fatigue.

Instead use fine strand cable insulated with silicon rubber available from auto electrical shops. Use a small good quality mechanical connector on the cable without solder, as the heat from soldering on fine strands can weaken the cable. Silicon rubber is a good substitute for the original and will not stiffen with age or heat.