

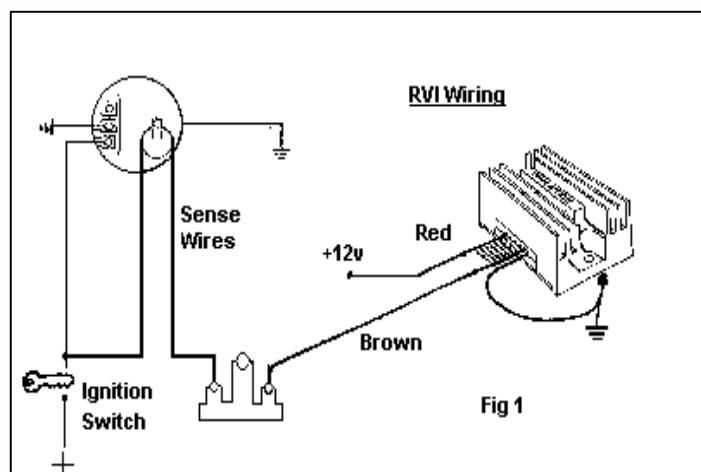
Lumenition Optronic^â and Performance Ignition System

Smiths Tachometers and Lumenition Ignition Systems

Introduction

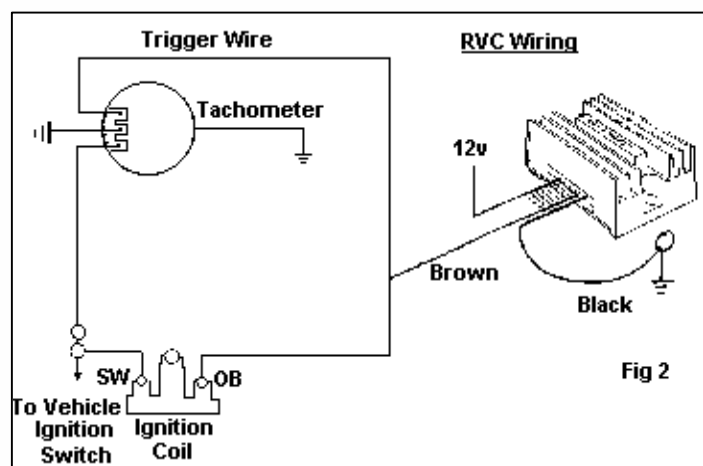
Most British vehicles that were fitted with a tachometer as standard were fitted with a Smiths Instruments device. These units come in three general types depending upon their triggering method. The first is mechanical and usually driven from the distributor shaft and has no electrical interface. Common in sports cars of the 50's and 60's.

Before 1974 (approx.) the electronic tachometer were current impulse triggered. This means the tachometer sense wire is connected in series with the ignition coil, usually between the ignition switch and coil/ballast positive as in Fig 1. Sometimes the power for the tachometer was shared internally with the ignition switch end of the sense wire giving only three terminals. Smiths unit of this type can be identified by the letters RVI on the face of the tachometer. Designed in the days of contact breakers, they give inconsistent results when used with electronic ignitions. Many installations will work but some will produce erratic or no movement of the indicating needle. Some suggestions for rewiring the ignition circuit to eliminate the problem have been tried with limited success.



Later electronic tachometers are voltage pulse triggered and the single sense wire is connected directly to coil negative as in Fig 2. Smith unit have the designation RVC printed on the face. As far Lumenition are aware there are no problems using this type of tachometer with our Optronic ignition.

It is important that owners can tell the difference between the two types of tachometer as incorrect wiring of the unit can cause damage to the electronic ignition module. If used the tachometer sensing wire(s) must be connected as appropriate for that particular design of tachometer.



Solution

NOTE: All of the following refers to negative earth vehicles.

As mentioned above some owners have tried alternative wiring for the sense wires with RVI tachometers with limited success. Lumenition's recommended solution is either to:

- Replace the RVI tachometer with a later RVC model if available or aftermarket equivalent or
- Convert the existing RVI tachometer to new internal electronics.

In both cases a minor wiring change must be made to the vehicles normal ignition circuit.

A number of companies can carry out the internal conversion of the tachometer. A company Lumenition can recommend is:

SPEEDY Cables, Instrument Division
Abercrave
Swansea
SA9 1SQ
UNITED KINGDOM

Phone +44 (0) 1639 732213
Fax +44 (0) 1639 732238

Optronic Ignition Systems

A BRITISH INVENTION

Manufactured by

LUMENITION

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