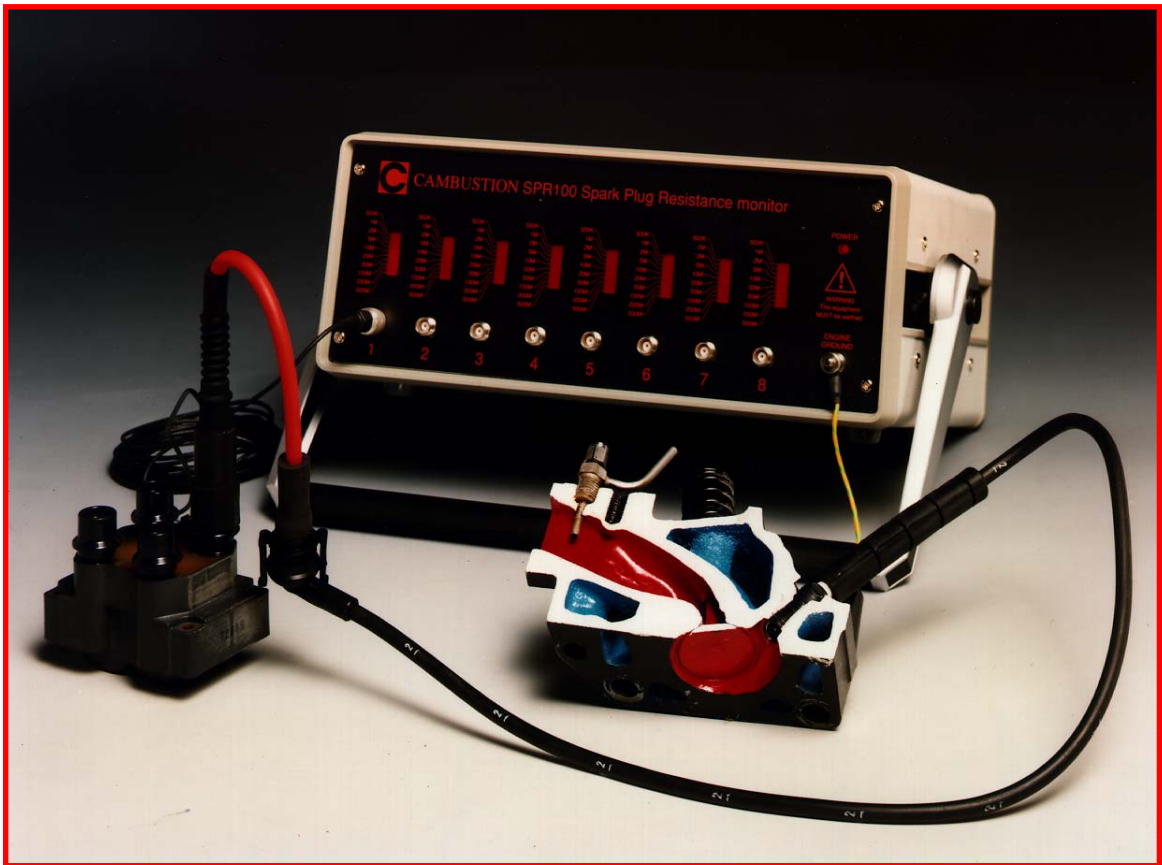




• CAMBUSTION •

# SPR100

## *Spark Plug Resistance Monitor*



- **Non-intrusive on-line measurement**
- **8 channels with visual displays**
- **DIS or distributor compatible**
- **Easily installed**

# Objective assessment of plug fouling

Delivery of vehicles from production line to showroom often involves many cold starts followed by short running periods and causes a progressive build up of deposits on the spark plug. These deposits lead to a reduction in the effectiveness of the insulator, eventually resulting in misfiring and possible catalyst damage.

The SPR100 has been designed to allow engineers to make objective assessments of techniques used to alleviate plug fouling. It minimises the requirement for expensive repetitive cold start testing to get statistically significant results. By continuously measuring the leakage resistance, the SPR100 can be used to investigate the fouling of spark plugs in a running engine.

Traditional investigations of plug fouling have involved the static measurement of the plug resistance immediately before and after a cold start. However, dynamic studies with the SPR100 have shown that the complex interaction of sooting and the formation of condensation from hot combustion gases on cold engine surfaces can lead to rapidly changing levels of fouling during engine operation. Such effects are undetectable by static measurement methods.

The SPR100 is capable of simultaneous continuous measurement on up to 8 channels, in real-time. Each channel is displayed on a visual bar graph indicator, and also has a 0-10v DC analogue output. The system is non-intrusive, can be installed in seconds, and is compatible with both DIS and distributor type ignition systems.

## Suggested Application

Gasoline, 2-stroke, or gaseous fuel engine application:

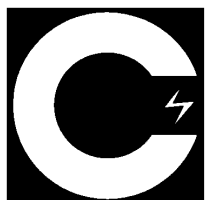
- Cold start plug fouling evaluation

Contact Cambustion for specimen data.

## SPR100 Specification

Number of channels	-	8
Display range	-	500 -0.5M $\Omega$ in 10 segments
Accuracy	-	$\pm$ 50mV (static), $\pm$ 50mV per 1000rpm (running)
Noise level	-	$\pm$ 50mV (static), $\pm$ 250mV (running)
Ambient sampling conditions	-	0 - 40°C
Output (analogue)	-	0 - 10v, <100 $\Omega$
Power supply	-	AC 50/60 Hz, 100-240V

Cambustion Ltd reserve the right to change this specification without notice



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