

Today's customers look for quality after-sales technical service. Big bills for replacing parts only «suspected» of causing the problem are no longer just accepted. Fast and precise diagnostic trouble-shooting is essential. Ignition circuit defects can be difficult to trace. There are many different types of ignition circuit to deal with. Corroded contacts may be the cause. IgnitionMate makes troubleshooting easier, surer, quicker. The IgnitionMate simultaneously monitors and displays two different ignition parameters, for example allowing the user to examine both secondary and primary peak voltage signals together, or secondary peak voltage and spark energy together. Troubleshooting is performed without disassembly of any component. This not only saves time, but also avoids accidently introducing (or correcting !) poor contacts in the system, which may further confuse and delay the resolution of unidentified anomalies. On-road testing is also possible, useful for intermittent faults which can be difficult to trace otherwise. The application of this versatile tool is mostly based on simple logic: if a «rough» signal output results from a «clean» signal input, then the component between them is responsible. Secondly, that a «good» spark ignition (meaning good plug, good mixture) displays a steady, «healthy» spark energy signal, together with a steady, moderate spark peak voltage signal. Rapid logical diagnosis of suspect components or contacts, or of poor or fouled spark plugs or mixture problems: all are easily and quickly accomplished. These qualities are especially useful in troubleshooting ignition circuits on seasonally used performance leisure vehicles and outboard motors. However, IgnitionMate can be used quickly and easily for the resolution of ignition problems on any spark-ignition engine.

## IgnitionMate

## The compact dual-display peak-voltage ignition tester.

Every type of spark-ignition circuit can be tested and any defect traced in minutes. Moreover, due to it's high-frequency monitoring, **IgnitionMate** can also be used to check other pulsed signals on vehicles, for example, to check the stability of a tachometer signal. Both pulsed and constant signals, AC or DC, can be monitored and automatically displayed.

Just clamp the combination spark energy and peak voltage pick-up around the spark plug cable, and use one set of primary side leads with probes, clips, (or fine probes for making contacts within water-proof covers) to monitor any desired point on the primary circuit. That's all it takes.

Then select scale combinations, and switch on. The scales are clearly indicated and can display (adjustable) spark energy and voltages from 0,5V to 40 kV. (No damage results when monitoring signals >40kV).

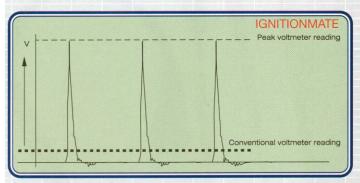
A selector provides for negative or positive polarity peak-V signals.

A cable set is provided for connection to an external 12V battery. A set of internal batteries is also provided. These are protected against accidental discharge by auto-switch-off after two minutes if no signals are monitored.

A LED warns in case of discharged batteries. With it's LED- array displays **IgnitionMate** is impact-resistant, and a rubber holder further protects this rugged instrument against shocks. **IgnitionMate** is delivered in a custom storage and travel case with detailed instructions.

## **LEGEND**

- 1. External battery connection port.
- 2. Low (primary) voltage test lead ports.
- 3. High voltage (kV) connection port.
- 4. Left LED bar display.
- 5. Right LED bar display
- 6. Eight scale indicators
- 7. Function selector for left display.
- 8. Spark polarity switch.
- 9. High voltage pick-up ground.
- High voltage pick-up.
- 11. Spark display sensitivity adjustment.
- 12. Low battery indicator.
- 13. Function & range selector for right bar display.
- 14. Power ON/OFF and reset switch.
- 15. Spark misfire «zoom» selector.
- 16. Alligator clips, probes & primary side leads.
- 17. Connection cord-set for external 12V battery
- 18. HT adapter to mount between stick coil & plug



	IGNITIONMATE	Standard Voltmeter	Multi-mete
Low A.C. volts constant	V		~
Low D.C. volts constant	~	-	~
High A.C. volts constant	V		V
High D.C. volts constant	V	V	~
Low A.C. volts pulse	V		
Low D.C. volts pulse	V		
High A.C. volts pulse	~		
High D.C. volts pulse	V		

