

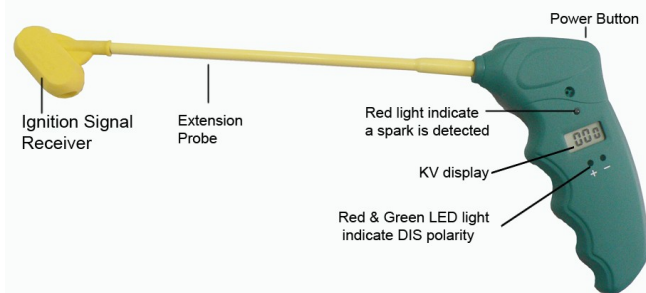
IGNITION SYSTEM KV/ARC QUICK TESTER MANUAL

The KV/Arc Quick Tester is a battery-operated, hand-held tester designed to easily and quickly check the presence of a spark in the vehicle's cylinders, determine the polarity (+/-), and measure the peak voltage as the spark plug is firing on Distributor and Distributorless ignition Systems.

The tester works by receiving a signal transmitted from the spark plug's wire. In the Quick Check Mode, the red LED light flashes when a spark is detected, If the polarity is negative (-), the green LED lights; and if positive (+), the red LED lights. In the Measurement Mode, the tester measures and displays the peak spark voltage for approximately 15 seconds.

Assembling the Tester

1. Attach the extension probe onto the tester.
2. Press fit the probe tip onto the extension probe.



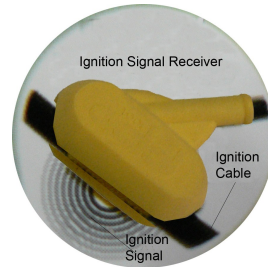
How Operate the Tester

1. Turn the tester on by firmly pressing the power button.

Note: When powered on, the tester is always in the Quick Check Mode. To switch to the Measurement Mode, firmly

press the power button.

To indicate the tester is on, the Red LED light, along with the red and green LED, flash alternately, and the tester emits a beeping sound for a short period .



2. With the engine running, firmly place the signal ignition signal receiver over the spark plug wire .For the best test results do the following:

Make sure all other secondary ignition wires and any metal objects are at least 1-inch from the ignition signal receiver. If adjacent wires/metal are too close during testing, the tester may provide inconsistent results.

Do not touch the ignition signal receiver or the extension probe while testing. Doing so will cause inaccurate readings.

On DIS vehicles, the wasted spark may cause a doubling of the spark detection. To avoid this and only detect the true spark, slightly move the probe tip away from the ignition cable.

·If the tester resets or changes mode during testing, the spark plug may not be firing and the high voltage is approaching the coil's maximum output voltage.

Quick Check Mode

To enter the Quick Check Mode, simply turn the tester on. The tester automatically enters this mode when it is powered on.

During this mode, the red and green LEDs alternately flash

once every second until a spark is detected.

Once a spark is detected, the Red LED light flashes and the red or the green LED lights to show the polarity.

Notes:

- 1.If the tester does not detect a spark after 30 seconds, it automatically turns off.**
- 2.The Quick Check Mode may not detect spark voltage less than 5 kV. Use the Measurement Mode to verify.**

Measurement Mode

To enter the Measurement Mode:

1. Firmly place the tester's ignition signal receiver over the secondary ignition wire.
2. Press the power/toggle button when the headlight begins to flash. During this mode, the red and green LEDs stay lit while the tester measures the peak spark voltage (for approximately 10 to 15 seconds). When the tester finishes a measurement, it will do all of the following:
 - The tester emits a beeping sound
 - The headlight flashes 3 times
 - The corresponding polarity LED lights
 - LCD displays the current reading for 15 seconds.

After completing this sequence, the tester returns to the Quick Test Mode. You can also return to the Quick Test Mode by pressing the power/toggle button while the kV is displayed.

Note: It is normal for the LCD to flash random segments while the peak kV is measured.

Interpreting the Results

1. Compare voltages for all cylinders.

·Make sure to measure at the same location on each wire.

·On DIS vehicles, the positive firing voltage is typically 3-5 kV less than the negative reading.

2. Voltages above 20 kV indicate a non-firing plug.

·May cause the tester to reset or change modes.

Turning the Tester Off

The tester automatically turns off after approximately 30 seconds of non-use. Before shutting off, all LEDs flash and the tester emits a beeping sound for a short period.

Replacing the Batteries

Replace the batteries when the polarity LEDs or the LCD segments become dim.

The kV/Arc Quick Tester uses two 3-volt CR2016 lithium batteries.

1.Remove the two screws from the handle.

2.Carefully separate the handle and remove the old batteries.

3.Place the new batteries in the handle, positive (+) side facing up.

4.Reassemble and tighten the screws.