### —Our Promise—

Whether you have a question about service or parts from Hickok or Waekon, we are ready to provide an answer. Options for reaching us include or 24/7 accessibility by fax or the World Wide Web. Or contact us by telephone during standard business hours EST.

www.hickok-inc.com

www.waekon.com

www.quick-n-ezparts.com

Fax: (216) 761-9879

Customer Care & Tech Support: (800) 342-5080

## -Warranty-

Subject to the conditions that follow and are noted below, this product is warranted to be free from defects in material and workmanship, under proper use and in accordance with the manufacturer's written recommendation and specifications, for a period designated below on all products:

· This product carries a limited lifetime warranty.

The manufacturer's obligation under this warranty is limited to unaltered products returned to the manufacturer by the initial end user of the new products. Therefore, this warranty does not cover any products resold by the end user to third parties, nor any reconditioned products sold as such, by the manufacturer. The sole remedy for any such defect shall be the repair, or replacement, of the product at the sole discretion of the manufacturer. This warranty does not cover expendable parts, such as batteries, nor does it cover shipping or handling. In addition, manufacturer is not liable for any loss or damage to product during shipping.

In the event it is determined that the product has been tampered with, or altered in any way, this warranty is void and all claims against the product will not be honored. All warranty claims must be submitted as outlined by the manufacturer and shall be processed in accordance with the manufacturer's established warranty claim procedures. These procedures include provisions that proof of purchase must be established (by either warranty card from the seller or by point of purchase receipt) and that the manufacturer will make every attempt to return ship the product within one business day from receipt of the returned product, freight prepaid.

In addition, all maintenance procedures, as outlined by the product manuals, should be followed for the warranty to be kept in force. Should the product not be used in accordance with procedures as specified, or if the product otherwise fails outside of the warranty, the manufacturer reserves the right to make such judgment and the party returning the product will be notified that written notification will be necessary to repair the product at a cost which the manufacturer deems as reasonable. The product will then be shipped back to the customer, COD; or as the manufacturer deems appropriate.

This is the only authorized manufacturer's warranty and is in lieu of all other expressed, or implied, warranties or representations, including but not limited to any implied warranties of merchantability or fitness or any other obligations on the part of the manufacturer. In no event will the manufacturer be liable for business interruptions, loss of profit, personal injury, costs of delays, or any special, indirect, incidental or consequential damages, costs or losses.





The Coil On Plug (COP) Ignition Quick Probe is a battery-operated, hand-held tester designed to easily and quickly determine if a COP is producing a proper spark for the plug.

The tester works by receiving a signal from the secondary ignition coil. Once the signal is received, the tester determines if the COP is producing the correct amount of voltage and the duration of the arc. If the voltage is correct, the tester beeps and the red LED headlamp flashes; and if the duration of the arc is correct, the green LED will also flash.

Note: Using this tester on non-COP vehicles may result in inaccurate results.

# —Assembling the Tester—

- 1. Attach the extension probe onto the tester's probe tip.
- 2. Press fit the signal receiver pad onto the extension probe.

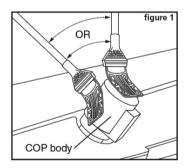
## —Using the Tester—

Turn on the tester by firmly tapping the handle
of the tester on a hard surface. To indicate the
tester is on, the red and green LEDs rapidly flash
alternately, and the tester emits an ascending
beeping sound for a short period. Afterwards,
until the tester turns off, the green LED continues
to slowly flash to indicate the tester is on.

Note: Firmly tapping the handle while the tester is turned on initiates a self-test, in which the both LEDs flash simultaneously and the tester beeps for a short period.

- 2. Adjust the probe for the test vehicle:
  - Turn the adjustment dial to zero for minimum sensitivity.
  - With the engine running, firmly place the tester's signal receiver pad against the COP's body (see figure 1). Make sure the marked side of the pad is towards the COP.
  - Because the tester relies on a signal emitted from the COP body, it may be necessary to move the signal receiver pad around until the pad is in a position to pick up the strongest

- signal. Then test each COP with the signal receiver pad in the same relative position. When the Red and Green LEDs begin to flash and the tester beeps simultaneously, stop turning the dial.
- At the current probe setting, continue to another COP. If the Red and Green LEDs do not begin to flash when the probe tip is applied, move to another COP. Repeat 2–3 times.
- Adjust the dial and repeat the above steps until a consistent response is achieved over several COPs.
- Continue testing each COP and compare the results.
  - It is important to test all of the vehicle's COPs and compare results. An inconsistent response from the majority of the COPs may be a normal condition for that engine. However, additional testing is recommended to verify results.
  - It is possible that a misfire may not develop while the engine is operating at low-speed, so it may be necessary to test the COP with the engine heated, under load, or brake torque (increased RPMs).



# —Turning the Tester Off—

The tester automatically turns off after approximately 2 minutes of non-use. Before shutting off, both LEDs fl ash and the tester emits a descending beeping sound for a short period.

### —Test Results—

#### **Red LED Headlamp**

Consistent, steady flashing and beeping indicates the COP is producing the correct amount of voltage.

No response or an inconsistent response indicates the COP is NOT producing the correct amount of voltage. This may be caused by one of the following:

- Fouled spark plug, or incorrect gap
- Damaged/corroded wires or connectors
- · Faulty coil, or control module

#### **Green LED**

Consistent and steady flashing indicates the duration of the arc is correct.

No response or an inconsistent response indicates the duration of the arc is NOT correct. This may be caused by one of the following:

- · Shorted windings inside the coil
- Resistance or bad connections in the primary/secondary connections
- Faulty coil

Please refer to the vehicle's shop manual for instructions on troubleshooting and repairing/replacing defective COPs.

## -Maintenance-

## **Replacing the Battery**

The Coil On Plug (COP) Quick Ignition Probe uses a 3-volt CR2032 lithium battery.

- Remove the two screws from the handle.
- 2. Carefully separate the handle and remove the old battery.
- 3. Place the new battery in the handle, positive (+) side facing up.
- 4. Reassemble and tighten the screws.

## The Signal Receiver Pad

It is recommended to visually inspect the signal receiver pad for any cracks or tears before every use. If damaged, replace the pad.