

## **SERIES 3 CDI TEST PROCEDURE**

This document is designed to be used in conjunction with the appropriate installation manual and general wiring instructions which can be found under the support tab on our website [www.mwignitions.com](http://www.mwignitions.com).

### **Visually inspect LED as unit is powered up:**

*(LED located adjacent main connector)*

- LED does not illuminate – **(2)**
- LED double flashes a repeating pattern – **(4)**
- LED illuminates for 1 second then goes out – **(6)**

### **2. Test for voltage and ground continuity on power supply terminals:**

*(Remove connector from cdi and directly probe terminals)*

- No power or ground detected – **(96)**
- Ground and power ok – **(3)**

### **3. Test for voltage on power switch terminal:**

*(Remove connector from cdi and directly probe terminals)*

- No voltage detected – **(96)**
- Voltage >5V detected – **(99)**

### **4. Disconnect all coils from CDI:**

*(Remove coils and re-connect power)*

- LED illuminates for 1 second then goes out – **(5)**
- LED double flashes a repeating pattern – **(99)**

### **5. Consecutively reconnect coils and inspect LED during power up:**

*(Cycle power after connecting coil)*

- Locate coil causing LED to double flash – **(98)**

### **6. Is cdi connected to ecu:**

- Yes – **(12)**
- No – **(7)**

### **7. Ground cdi trigger inputs:**

*(Consecutively and momentarily ground all trigger inputs)*

- LED flashes when input grounded – **(9)**
- LED does not flash when input grounded – **(8)**

### **8. Inspect connector terminal and wiring:**

*(Remove terminal from plug housing if necessary)*

- Wiring and/or terminal faulty – **(96)**
- Wiring and terminal OK – **(99)**

**9. Connect coils & grounded sparks plug to cdi outputs:**

*(Consecutively ground input triggers after applying power)*

All spark plugs fire – **(90)**

Only some spark plugs fire – **(10)**

No spark plugs fire – **(99)**

**10. Swap ignition coil:**

*(Swap coil with one that is firing and repeat test)*

Different coil faulty – **(11)**

Same coil faulty – **(97)**

**11. Inspect connector terminal and wiring:**

*(Remove terminal from plug housing if necessary)*

Wiring and terminal OK – **(99)**

Wiring and/or terminal faulty – **(96)**

**12. Crank engine while inspecting LED:**

LED flashes with engine rotation – **(13)**

LED does not flash – **(16)**

**13. Connect coils & grounded spark plugs to cdi outputs:**

*(Crank engine and observe spark plugs)*

All spark plugs fire – **(90)**

Only some spark plugs fire – **(14)**

No spark plugs fire – **(99)**

**14. Swap ignition coil:**

*(Swap coil with one that is firing and repeat test)*

Different coil faulty – **(15)**

Same coil faulty – **(97)**

**15. Inspect connector terminal and wiring:**

*(Remove terminal from plug housing if necessary)*

Wiring and terminal OK – 99

Wiring and/or terminal faulty – 96

**16. Ground cdi trigger inputs:**

*(Consecutively and momentarily ground all trigger inputs)*

LED flashes when input grounded – **(95)**

LED does not flash when input grounded – **(96)**

**90. Unit operating normally:**

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**95. ECU not triggering CDI**

Inspect wiring and consult ECU supplier.

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**96. Faulty wiring**

Repair or replace wiring a necessary, re test ignition.

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**97. Faulty Ignition Coil**

Replace Ignition Coil as necessary.

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**98. Coil output damaged:**Mark last coil connected to ignition as faulty – **(99)****99. Unit faulty:**

Return ignition unit to manufacture for repair.

Instructions and RMA documentation may be found under support tab on our website [www.mwignitions.com](http://www.mwignitions.com).

PRELIMINARY