

CUMMINS IGNITION MODULE TESTER

HELPS DIAGNOSE:

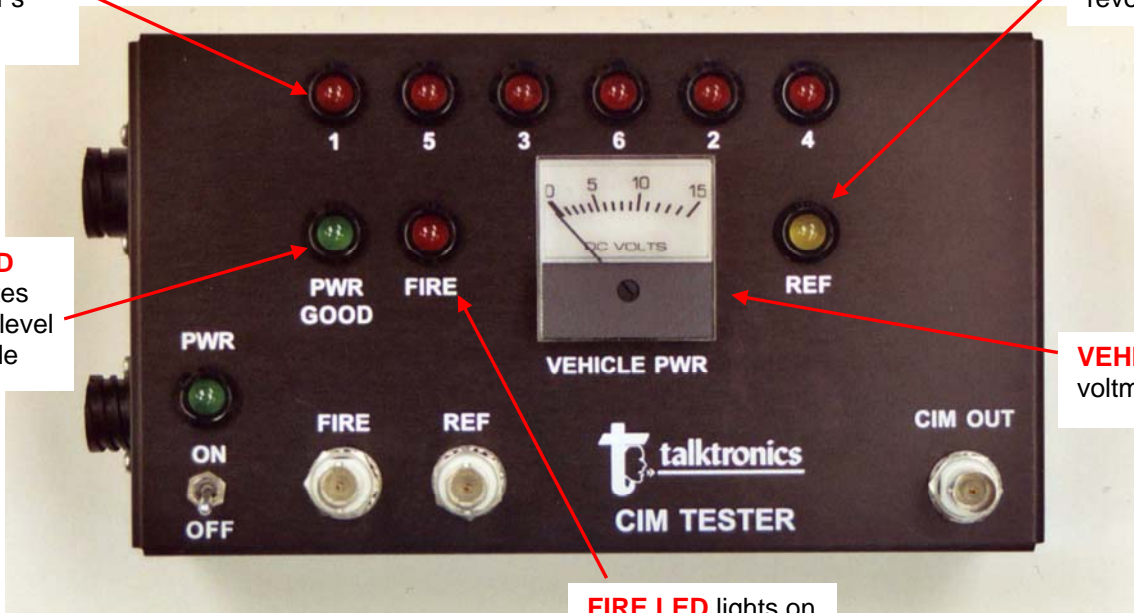
- INTERMITTENT CYLINDER FIRING
- DEFECTIVE CYLINDER IGNITERS
- ENGINE "NO START"
- DEFECTIVE CIM

CYLINDER LED's indicate each igniter's activity

REF LED lights once per cam revolution

PWR GOOD LED indicates CIM power level is acceptable

VEHICLE PWR voltmeter



FIRE LED lights on each combustion

The CIM TESTER provides a means to display cylinder activity of the Cummins Ignition Module on C, B and L engines. The tester monitors the input and output connections between the Cummins Engine Control Module and the Ignition Module, displaying cylinder coil activity while the engine is running. The CIM TESTER also displays vehicle battery voltage level at the Ignition Module on an analog meter. A threshold voltage detector displays low-battery condition with an LED. Additional LED's indicates ignition FIRE time, and camshaft REF signal. The TESTER can be used to assist in engine performance/failure troubleshooting.

The unit is powered from the Ignition Module power cable. The Ignition Module output cable is interrupted by the TESTER feed-through cable to monitor individual cylinder output voltage. The TESTER uses voltage-threshold detection circuits on each cylinder output matched to the typical coil voltage characteristics of the Cummins system so that marginal output and coil problems will be detected. Each cylinder's detector circuit independently measures the threshold voltage to meet the manufacturer's specification for firing voltage characteristics.

SPECIFICATIONS

Input	8 – 16V 1A max (0.5A typ.) (Internally fused)
Enclosure	Aluminum, 4.5" x 8" x 3"
Cylinder Voltage	240-260V, 40-50 microseconds duration
Cables Supplied	6 feet, 4-pin & 6-pin Weatherpak to CIM/ECM

ENGINES

“C” (8.3L), “B” (5.9L), “L10” (10L)

WARRANTY:

1 year

TYPICAL TESTER OPERATION

When the vehicle ignition (key) is powered on, power is applied to the TESTER via the power switch, and the green PWR LED will be illuminated. The other green LED marked PWR GOOD will also be lit when the vehicle battery voltage is greater than 9 volts.

Observe the box lights while cranking and running the engine. The red individual cylinder LED's (6) will flash when that cylinder coils fires. This indicates that each of the six ignition coils are providing adequate spark voltage to the plugs.

The spark FIRE LED (red) will be lit when the ignition switch is keyed on. This will flash as the ECM provides a spark timing signal to the CIM (one flash for each combustion). It should be solidly on (no flashing) if the ECM is disconnected. The spark reference (REF) LED (green) will flash once per camshaft revolution. This is the synchronization pulse from the ECM to the CIM. With the ECM disconnected from the circuit, it too will be solidly on.

CIM TROUBLESHOOTING

Condition	Diagnosis
All lights flash while running or cranking.	No CIM ignition faults.
One cylinder light does not flash while running.	CIM output failure on one cylinder; this could be an open connection to the coil or an CIM failure.
All 6 cylinder lights do not flash while cranking, but Reference and Fire lights flash.	CIM failure or low vehicle battery voltage; read voltage meter on Diagnostic Box for CIM voltage and observe "PWR GOOD" light.
Spark Reference light does not flash while cranking.	ECM, wiring, or EPS failure. Disconnect ECM from circuit and see if "REF" light stays on.
Spark "FIRE" light does not flash while cranking.	ECM, wiring, or EPS failure. Disconnect ECM from circuit and see if "FIRE" light stays on.
Box "PWR" light does not light with switch on.	CIM Diagnostic Box is damaged, or faulty cables/wiring. Apply 12-16V between pins A and B of the 6-pin connector, switch on to see if Diagnostic Box is okay.
Engine "PWR GOOD" light does not light with key on.	Battery or ground is not being delivered to the ignition module, or vehicle battery voltage is less than 9V.

DON'T REPLACE THE ICM UNNECESSARILY!

**BY PREVENTING MIS-DIAGNOSIS OF ICM FAILURE,
THE CIM TESTER PAYS FOR ITSELF WITH ONE USE**



CIM-2000 kit comes with cables as shown

ORDERING INFORMATION:

Telephone orders accepted 9:00AM – 5:00PM PST, dial (949) 215-2903.
D&B rated firms, Purchase Order accepted, net 30 terms.
VISA/MASTERCARD accepted.

PRICE: \$595.00



Talktronics, Inc.
23400 Peralta Drive, Suite D
Laguna Hills, California 92653
(949) 215-2903 (949) 215-2913 FAX

<http://www.talktronics.com>

email: dtriman@talktronics.com