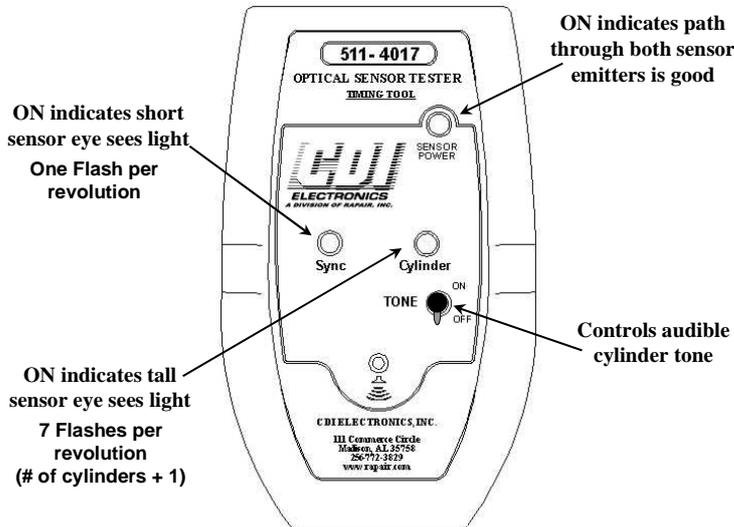


CDI P/N: 511-4017 Optical Sensor Tester/Timing Tool

NOTICE: This product is intended for use by professional marine mechanics. CDI Electronics cannot be held liable for injury or damage resulting from improper use, abuse, neglect, or misuse of this product.



The optical sensor works by shining infrared light through the windows in the timing wheel to photo sensors on the other side. Infrared light is also used in most TV type remote controls and is not visible to the human eye. As the sensor is light sensitive, avoid exposure to bright sunlight when the timing wheel cover is removed and never point a timing light at the sensor.

Ensure there is no blockage or cracks in the timing wheel and no obstructions or liquid in the sensor. When cleaning the sensor, do not use any solvents as these can damage the sensor's lenses. Soap and water is recommended.

- Remove the regulator cover and disconnect the timing sensor plug.
- Attach the 511-4017 Sensor Tester to the timing sensor and a 12V source.
- The GREEN "Sensor Power" indicator should light indicating that the sensor's light emitters are working. If this indicator does not light the sensor is bad.
- Crank the engine briefly while observing the RED "Sync" and "Cylinder" indicators. There should be one Sync and 7 Cylinder pulses per engine revolution for a V6, one Sync and 5 Cylinder pulses for a V4. If either of these indicators fails to flash or stays on continuously the sensor is bad.

When using the Sensor Tester/Timing Tool for adjusting static timing, switch the "Tone" function on. The tester will sound a loud tone whenever the "Cylinder" indicator is on allowing you to set the timing while looking at the timing pointer instead of the tester.

OPERATING

Set the timing according to the service manual for your engine. You must perform the Sync & Link procedure in order to have the engine perform normally.

ENGINE	IDLE Timing	WOT Timing
90/115/150/175	4-6 Deg ATDC	19-20 Deg BTDC
100/105/105WR/115JPL	4-6 Deg ATDC	22 Deg BTDC

NOTE: Adjust the idle timing to adjust the idle speed.