Twin Tec

Installation Instructions for Oxygen Sensor Eliminator Kit

CAREFULLY READ INSTRUCTIONS BEFORE PROCEEDING.

NOT LEGAL FOR USE OR SALE IN CALIFORNIA OR ON POLLUTION CONTROLLED VEHICLES.

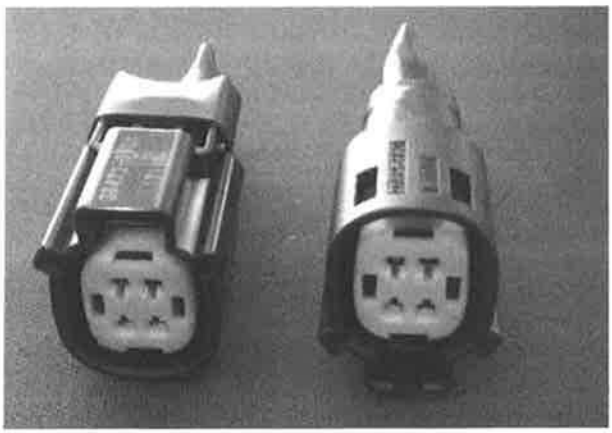
OVERVIEW

2006 fuel injected Dyna® and all 2007 and later Harley-Davidson models are equipped with dual narrow-band exhaust gas oxygen (EGO) sensors and a Delphi® ECM that supports closed loop air/fuel ratio (AFR) control based on feedback from the sensors. After the engine has warmed up, the ECM will maintain the AFR at 14.6 during idle and part throttle cruise. While the ECM is in closed loop operation, you cannot change the AFR at idle and part throttle cruise by adding fuel with add-on controllers such as our Twin Tuner series. The ECM will correct for any attempt to add fuel in these operating ranges. For off-road racing where AFR changes are required at idle and part throttle, you can install our oxygen sensor eliminator kit P/N 18001 for two wire sensors, P/N 18002 for four wire sensors used on 2010 and later touring models or P/N 18000 for 2014 and later Sportsters®. This consists of a pair of oxygen sensor eliminators that plug into the wire harness in place of the original equipment oxygen sensors. The oxygen sensor eliminators contain a 1.0 megohm resistor that simulates a cold sensor condition and causes the ECM to remain in open loop operation. Once oxygen sensor eliminators are installed, you can make AFR changes throughout the entire engine operating range from idle to wide open throttle.

Figure 1 – Two Wire Oxygen Sensor Eliminator Kit



Figure 2 – 2014 and later Sportsters Oxygen Sensor Eliminator Kit



INSTALLATION

Disconnect the front and rear oxygen sensors from the wiring harness and plug in the oxygen sensors eliminators. You can remove the oxygen sensors from the exhaust. We offer 18 x 1.5 mm hex socket plugs (P/N 115002) for this purpose. Note that as long as you do not use leaded racing gasoline, the oxygen sensors used in these applications are not damaged by remaining in the exhaust while disconnected.