

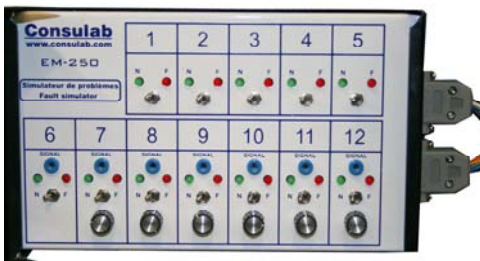
FAULT INSERTION MODULES FOR ENGINE TRAINERS



DESCRIPTION

The EM-250/EM-250-2 Fault Insertion Modules for Engine Trainers are devices that enable failure or malfunction of engine sensors and actuators without having to remove or replace the affected part. The fault modules comes with two fifteen-pin connectors (male and female).

The equipment is used to intercept data link communication between the PCM and the engine operating parts, and can be installed on all Consulab engine trainers. If the faults are disabled, the fault box will not affect normal operation of the engine.



The EM-250 includes the following:

- Twelve (12) faults with indicators, enabling/disabling switches, test points and potentiometers for adjusting the signals;
- Two (2) fifteen-pin connectors (male and female) for connection to pre-wired Consulab gas engine trainers; and,
- One (1) lockable metal case with 2 keys.

The fault insertion module acts on the following:

- Camshaft Position (CAM);
- Injector Output (INJ);
- Heated Exhaust Gas Oxygen Sensor to Catalyst Input (HO₂S-1);
- Heated Exhaust Gas Oxygen Sensor to Catalyst Output (HO₂S-2);
- Throttle Position (TP);
- Manifold Absolute Pressure (MAP);
- Engine Coolant Temperature (ECT);
- Intake Air Temperature (IAT);
- Idle Air Control (IAC);
- Fuel Pump (FP);
- Crankshaft Position (CRANK); and,
- Evaporative Emission (EVAP).



EM-250-2 ELECTRONIC VERSION

- Normal/Intermittent Fault Modes
- Local & Remote Control
- 12 Programmable Faults