

# Diesel Exhaust and Emission Systems

New  
Course

Understanding diesel exhaust treatment systems is fundamental to any one working on diesel vehicles. Field issues, diagnostics and servicing is often centred around the emission control systems, their complex interaction and impact on vehicle operation.

## Objectives of this training course:

- Understanding formation and treatment of diesel emissions
- Implication of faults on vehicle behaviour
- Equipment required for diagnostics and repair
- Diagnostic tips and hints
- Interpreting scan tool and oscilloscope data

## Course topics include:

- Diesel emission formation in the combustion processes
- Overview of changing legislation and future diesel outlook
- Emissions reduction technologies, including;
  - DOC - Diesel Oxidisation Convertor
  - NOx storage convertors
  - Glow systems
  - EGR – Exhaust Gas Recirculation (Lo & Hi pressure)
  - DPF – Diesel Particulate Filters
  - Departronic – ‘5<sup>th</sup> injector’
  - SCR – Selective Catalytic Reduction inc. dual injection
  - DENOX SCR systems
- Sensors associated with diesel emission control systems including;
  - Wide band Oxygen sensors
  - NOx sensors
  - Particulate sensors
  - Differential pressure sensors
  - EGT sensor variants
  - Cylinder pressure sensors



Practical sessions are undertaken to further enhance trainee understanding and diagnostic skills, these sessions include:

- Fault diagnosis and system testing using scan tools
- DENOX system testing and service parts
- Oscilloscope electrical testing of sensors and actuators

*This course is recommended for all technicians that perform repair work on vehicles equipped with modern diesel systems. Attending CRSD (Common Rail Systems Diagnosis) is recommended.*

Course Duration – **1 full day**

Locations – **Melbourne, Sydney, Brisbane, Adelaide, Perth, Auckland**

