

# JOB DESCRIPTION

**Job title:** Calibration engineer – Diesel on-board diagnostics

**Department:** Calibration

**Reporting to:** Calibration manager

**Location:** Dunton

**Job purpose:** To develop, validate, sign-off and deliver all aspects of on-Board diagnostic calibration, in order to robustly meet customer and legislated requirements.

## **Key responsibilities:**

- Development of engine management system calibration in-line with customer requirements
- Generate desktop OBD calibration, using component specifications, previous programs and customer philosophies whilst ensuring legal requirements are met.
- Conduct in-vehicle and rig based DV testing of all OBD fault paths, and maintain evidence document
- Specify and validate all limp home reactions in line with customer requirements
- Conduct hardware in the Loop (HiL) validation testing
- Ensure legislated requirements of service modes \$01 to \$09 are met
- Plan, conduct and report on validation tests, in accordance with appropriate calibration processes.
- Conduct hot, cold and altitude environmental testing
- Interact with base calibration teams to understand interaction of closed loop control algorithms with plausibility diagnostics
- Liaise with dealer diagnostics to ensure accurate and reliable service diagnostic repair actions are specified and implemented.
- Support witnessed certification testing
- Develop plans for calibration programmes to meet customer objectives.
- Liaise with customers and suppliers in a professional manner at all times

### Knowledge/understanding

- Diesel engine operating principles
  - Fuel injection systems
  - Air induction
  - Exhaust and catalytic process
- Principles of engine management systems operation
- E-OBD legislated requirements
- Electrical sub-system and sensor/actuator knowledge
- ECU communication protocols (CAN/SCP/KW2000)
- Knowledge of scan tools and their operation
- EMS System FMEA's and component failure modes
- Closed loop control systems
- Electrical fault finding and rectification
- Principles of diesel emissions control and after treatment technology

### Values

Can do	Must possess a positive attitude and display the ability to identify alternative solutions to problems
Relentless	In exceeding customer expectations and continually exceeding goals
Rigorous	A commitment to achieving the best solutions
Creativity	Endeavour to find new ways of doing things and learn from past experiences