

AEL Powertrain Solutions

working together with
General Motors and Educational establishments
providing state of the art
engine simulation run rigs.

AEL Powertrain Solutions based in the UK, was formed in response to the growing number of customers from a wide variety of market sectors, who require electromechanical powertrain integrated solutions to match their individual needs.

Working in partnership with General Motors, Powertrain Solutions offer a one stop shop enabling General Motors drivetrains to be used in a wide variety of applications, utilising the very latest technology developing Canbus interface boxes to individual client specifications.

Following the Autosport Engineering Show at the NEC in Birmingham in January of this year. A number of colleges and training providers enquired as to the feasibility of the company producing engine run rigs for teaching and learning scenarios. After researching the market and taking advice from Brooksby Melton and Walsall Colleges automotive technology sections. We have developed a state of the art engine run rig based on a Vauxhall 1.3 DTE Euro 5 diesel engine. Where possible the rig has been designed following the requirements of the IMI Level 3 AL Diploma in Vehicle Maintenance and Repair.

The Product

A full running and moveable engine test rig that can be used as a practical classroom teaching aid.

Based on a Vauxhall Corsa diesel engine Euro 5 1.3 DTE with CAN

Fitted with adaptor run box, clocks and gauges, wiring harness, ECU, ABS, fuel tank, break out boxes with heavy duty snap on connectors for intensive use, battery, cooling and exhaust systems, turbo, fault finding facility.

Emphasis on new technology, safety, the curriculum, the environment and value for money.

Where possible we have introduced faults for a variety of conditions.

- Open circuit.
- Short to battery.
- Short to ground.
- High resistance.

There may be some circuits where a short to battery will not be possible due to the risk of damaging components.

Another design feature is a central point for taking voltage readings and scope measurements without having to remove connectors. The reason for this is that constant removal of connectors does damage them and makes them unreliable.

On top of this we will integrate sub systems like the electrical functionality of the ABS controller. This will include the wheel speed sensors.

This unique product will allow trainers to set faults within the electronic management system. Allowing students to fault find using diagnostic equipment with live scenarios.



We are launching the engine run rig

named as EDPRO 13 at the **Autosport Engineering Show** at the NEC Birmingham on **12/13 January 2012** Hall 9 Stand E967



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