Perkins Fuel Injectors: Avoid Costly Repairs with E-Trim Codes

Introduction

Perkins new and remanufactured electronic fuel injectors all include a factory established E-Trim code. Each E-Trim code is unique and normalises the performance of injectors by reducing variability.

With the correct E-Trim codes from Perkins, our injectors are uniquely controlled to optimise engine performance and fuel economy. Ensuring proper engine calibration, emissions compliance, as well as minimising cylinder-to-cylinder variation and helping to avoid issues that can lead to component and oil degradation.

As Injectors are installed into the engine cylinders, the ECM is programmed with the corresponding E-Trim codes to maximise performance.

Each time injectors are removed or replaced, the E-Trim will need to be updated as each code is unique and matched to the injector.

Factory injectors tested for production delivery and timing variation
Perkins E-Trim

All E-Trim codes and files can be found on a CD that comes inside the injector packaging or by contacting your local Perkins distributor.

Only genuine injectors can be matched to a trim code.

Why E-Trim Codes are Important

- Optimise engine performance for power
- Ensure emission performance meets specifications
- Optimise fuel efficiency
- Maximise engine life
Common Rail Injectors

- E-Trim codes allow the injector and ECM to communicate compensating for injector performance changes over the life of the injector.

E-Trim codes

- E-Trim codes are key to ensuring the injector delivers fuel accurately.
- Inaccurate fuel delivery not only can it affect cylinder balance, power emissions and fuel consumption, but it can also affect cylinder pressures and hence the mechanical durability of the engine.
- There is also a risk of injection inconsistency resulting in a deterioration of engine noise, vibration, harshness (NVH).

Key facts:

- E-Trim test points are captured at the end of each injector production line to minimise injector-to-injector variability over multiple test points and guarantee quality performance.
- New and remanufactured electronic injectors are supplied with E-Trim codes as well as carrying 12 months parts warranty to give you total peace of mind.

If you would like to find out more, please click here, or visit the [http://www.perkins.com](http://www.perkins.com) site for more information.

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**How to get E-Trim Codes and Files**

**Customer Electronic Service Tool (EST)**

- Customer EST can access the ECM and install E-Trim codes and files on the ECM.
- Customer EST can run diagnostic programs.
- EST Licenses can be purchased through your Perkins distributor.

**Distributor EST**

- Distributor EST has access to the ECM for flashing E-Trim codes and files.
- Distributor EST can install other software updates on a service call or in workshop.

**Risks of using incorrect E-Trim:**

- Low power
- Idle instability
- Smoke
- Emissions non-compliance issues
- High fuel consumption