

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

Introduction

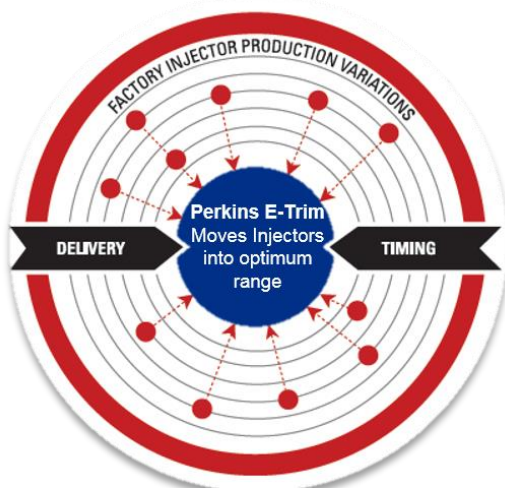
Perkins new and remanufactured electronic fuel injectors all include a factory established E-Trim code. Each E-Trim code is unique and normalises the performance of injectors by reducing variability.

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

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

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> site for more information.