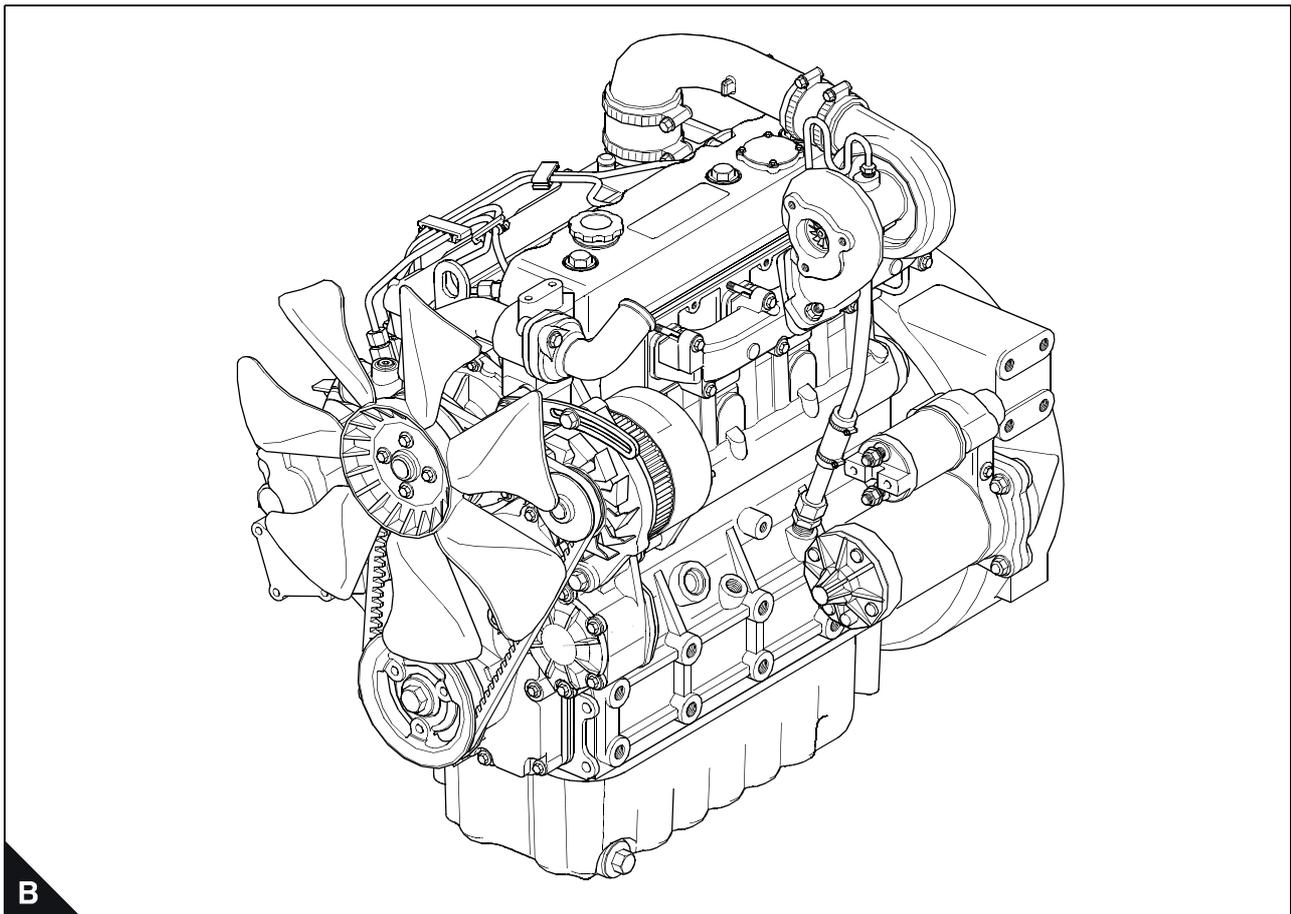
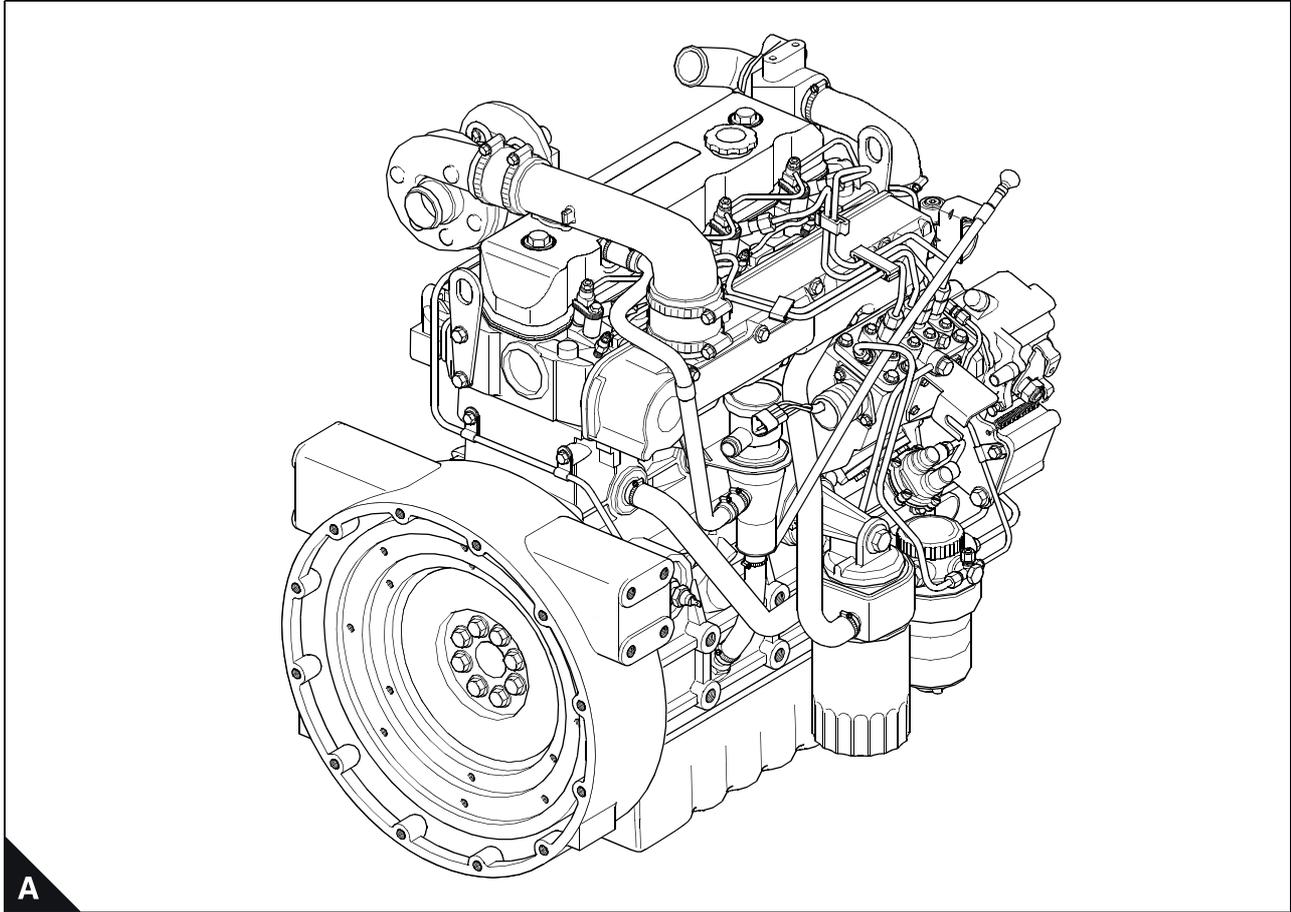


Engine views - Turbocharged engine



Engine I.D. location

The engine number is stamped on a label (A1) that is located on the right rear side of the engine. It consists of the following:

Abbreviations and codes

Engine build list numbering system.

The engine parts list numbering system is defined as follows:

Code	I	II	III	IV	V
Example	UA	80862	U	000001	A

Code I Engine type code

Engine	Code
704 - 26	UA
704 - 30	UB
704 - 30T	UC

Code II Engine build list number

Build list number is dependent upon specification.

Code III Country of manufacture

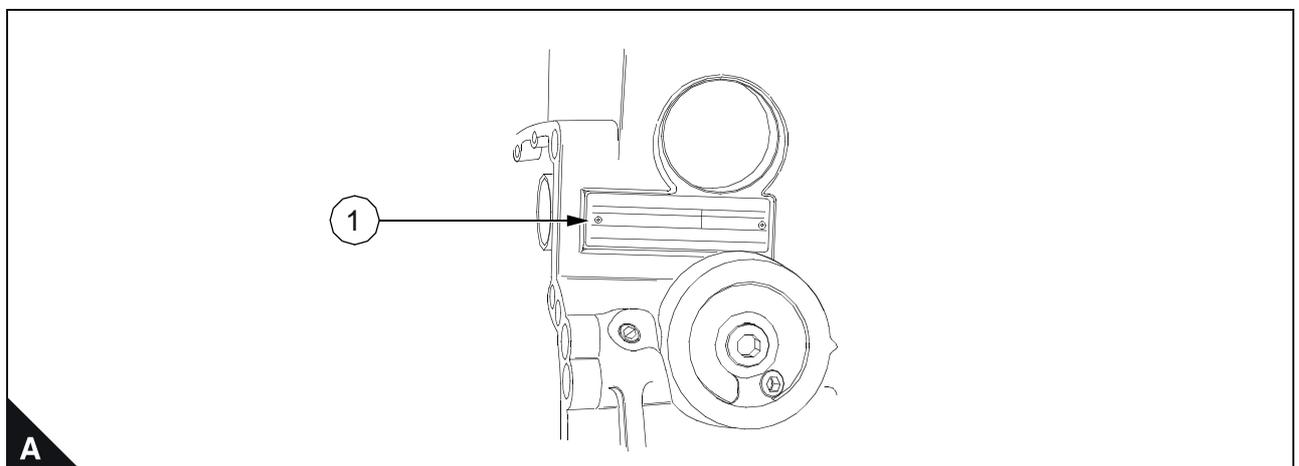
Code	Country of manufacture
U	Made in U.K.

Code IV Engine serial number

The engine serial number is sequential.

Code V Year of Manufacture

Code	Year	Code	Year
A	1995	F	1/4/1999 - 31/12/1999
B	1996	G	2000
C	1997	H	2001
D	1998	J	2002
E	1/1/1999 - 31/3/1999		



Safety precautions

These safety precautions are important. You must refer also to the local regulations in the country of use. Some items only refer to specific applications.

- These safety precautions are important. You must refer also to the local regulations in the country of use. Some items only apply to specific applications.
- Always refer to the text of the operations within this workshop manual for specific warnings and cautions.
- Only use these engines in the type of application for that they have been designed.
- Do not change the specification of the engine.
- Do not smoke when you put fuel in the tank.
- Clean away fuel that has been spilt. Material that has been contaminated by fuel must be moved to a safe place.
- Do not put fuel in the tank while the engine runs (unless it is absolutely necessary).
- Do not clean, add lubricating oil, or adjust the engine while it runs (unless you have had the correct training; even then extreme caution must be used to prevent injury).
- Do not make adjustments that you do not understand.
- Ensure that the engine does not run in a location where it can cause a concentration of toxic emissions.
- Other persons must be kept at a safe distance while the engine, auxiliary equipment is in operation.
- Do not permit loose clothing or long hair near moving parts.
- Keep away from moving parts during engine operation.

Warning! *Some moving parts cannot be seen clearly while the engine runs.*

- Do not operate the engine if a safety guard has been removed.
- Do not remove the filler cap or any component of the cooling system while the engine is hot and while the coolant is under pressure, because dangerous hot coolant can be discharged.
- Do not allow sparks or fire near the batteries (especially when the batteries are on charge) because the gases from the electrolyte are highly flammable. The battery fluid is dangerous to the skin and especially to the eyes.
- Disconnect the battery terminals before a repair is made to the electrical system. Only one person must control the engine.
- Ensure that the engine is operated only from the control panel or from the operator's position.
- If your skin comes into contact with high-pressure fuel, obtain medical assistance immediately.
- Diesel fuel and lubricating oil (especially used lubricating oil) can damage the skin of certain persons. Protect your hands with gloves or a special solution to protect the skin.
- Do not wear clothing that is contaminated by lubricating oil. Do not put material that is contaminated with oil into the pockets.
- Discard used lubricating oil in accordance with local regulations to prevent contamination.
- Ensure that the control lever of the transmission drive is in the "out-of-drive" position before the engine is started.
- Use extreme care if emergency repairs must be made in adverse conditions.
- The combustible material of some components of the engine (for example certain seals) can become extremely dangerous if it is burned. Never allow this burnt material to come into contact with the skin or with the eyes. Refer to "Viton seals" on page 8.
- Read and use the instructions relevant to "Engine lift equipment" on page 9.
- Always use a safety cage to protect the operator when a component is to be pressure tested in a container of water. Fit safety wires to secure the plugs that seal the hose connections of a component that is to be pressure tested.
- Do not allow compressed air to contact your skin. If compressed air enters your skin, obtain medical help immediately.

Continued

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- Turbochargers operate at high speed and at high temperatures. Keep fingers, tools and items away from the inlet and outlet ports of the turbocharger and prevent contact with hot surfaces.
 - Do not wash an engine while it runs or while it is hot. If cold cleaning fluids are applied to a hot engine, certain components on the engine could be damaged.
 - Some components are not waterproof and should not be washed with a high-pressure water jet or steam.
 - Fit only genuine Perkins parts.

Viton seals

Some seals used in engines and in components fitted to engines are made of Viton.

Viton is used by many manufacturers and is a safe material under normal conditions of operation. If Viton is burned, a product of this burnt material is an acid that is extremely dangerous. Never allow this burnt material to come into contact with the skin or with the eyes.

If it is necessary to come into contact with components that have been burnt, ensure that the precautions that follow are used:

- Ensure that the components have cooled.
- Use Neoprene gloves and discard the gloves safely after use.
- Wash the area with calcium hydroxide solution and then with clean water.
- Disposal of components and gloves that are contaminated must be in accordance with local regulations.

If there is contamination of the skin or eyes wash the affected area with a continuous supply of clean water or with calcium hydroxide solution for 15 - 60 minutes. **Obtain immediate medical attention.**

Safety cautions when an engine is cleaned

Care should be taken, when an engine is cleaned with a high pressure cleaning system.

Cautions:

- *Do not wash an engine while it runs or while it is hot. If cold cleaning fluids are applied to a hot engine, certain components on the engine could be damaged.*
- *Leave the engine to cool for at least one hour and disconnect the battery connections before cleaning.*
- *Do not wash any part of the fuel injection pump (FIP), cold start device, electrical shut off solenoid (ESOS) or electrical connectors.*
- *Ensure that the alternator, starter motor and any other electrical components are shielded and not directly cleaned by the high pressure cleaning system.*

If these cautions are ignored, the engine or certain components could be damaged, fail to operate and also make the manufacturer's warranty invalid.