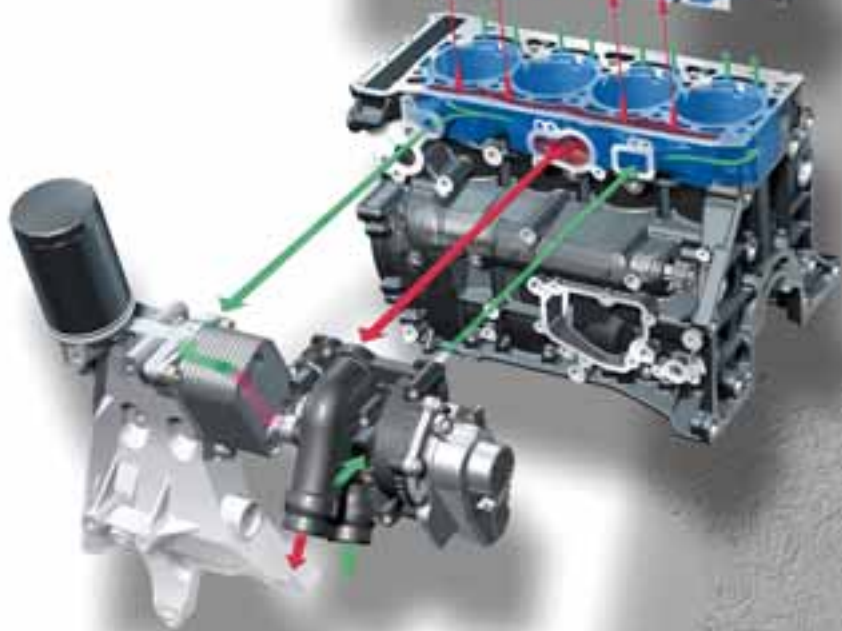


## **Audi chain-driven 1.8 litre 4V TFSI engine**

Self-Study Programme 384



The new 1.8-litre 4V TFSI engine belongs to the a new technology optimised R4 engine generation. It will replace today's MPI engines and supersede the old engine family (EA 113). The new engine generation (EA 888) will be used throughout the VW Group in many different products. The first application is in the Audi A3.

This Self-Study Programme describes the new engine, which is installed transversely in the Audi A3. In the case of longitudinally installed engines or when the engine is installed in other vehicles of the VW Group, it may be necessary to modify the technical specifications to suit each vehicle.

The focus of development work was on achieving the following project goals:

- ▶ Cutting unit costs by implementing:
  - new standards in technical concepts and production technologies
  - a common parts strategy
- ▶ Compliance with miscellaneous vehicle-specific requirements:
  - transverse and longitudinal installation
  - statutory requirements, such as pedestrian safety and *footwell intrusion*\*
- ▶ Technology:
  - compact design
  - acoustics
  - improved efficiency (mechanical and thermodynamic)
- ▶ Compliance with applicable exhaust emission, noise emission and environmental regulations
- ▶ Ease of servicing

Characteristic features:

- High/low-end torque
- High power potential
- High fuel efficiency
- Excellent spontaneity and elasticity
- High level of comfort

\* *Footwell intrusion*  
*The intrusion of objects into the footwell during an accident.*

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The self-study programme teaches the design and function of new vehicle models, new automotive components or new technologies.

**The Self-Study Programme is not a Repair Manual!**  
The values given are intended as a guideline only and refer to the software version valid at the time of publication of the SSP.

For maintenance and repair work, always refer to the current technical literature.

