

Service Training



Self-Study Program 822703

# Volkswagen 4.2L V8 FSI Engine



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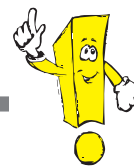
Always check Technical Bulletins and the latest electronic repair information for information that may supersede any information included in this booklet.

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**Note**



**Important!**



This Self-Study Program covers information on the Volkswagen 4.2L V8 FSI Engine. This Self-Study Program is not a Repair Manual. This information will not be updated.

For testing, adjustment and repair procedures, always refer to the latest electronic service information.

# Introduction

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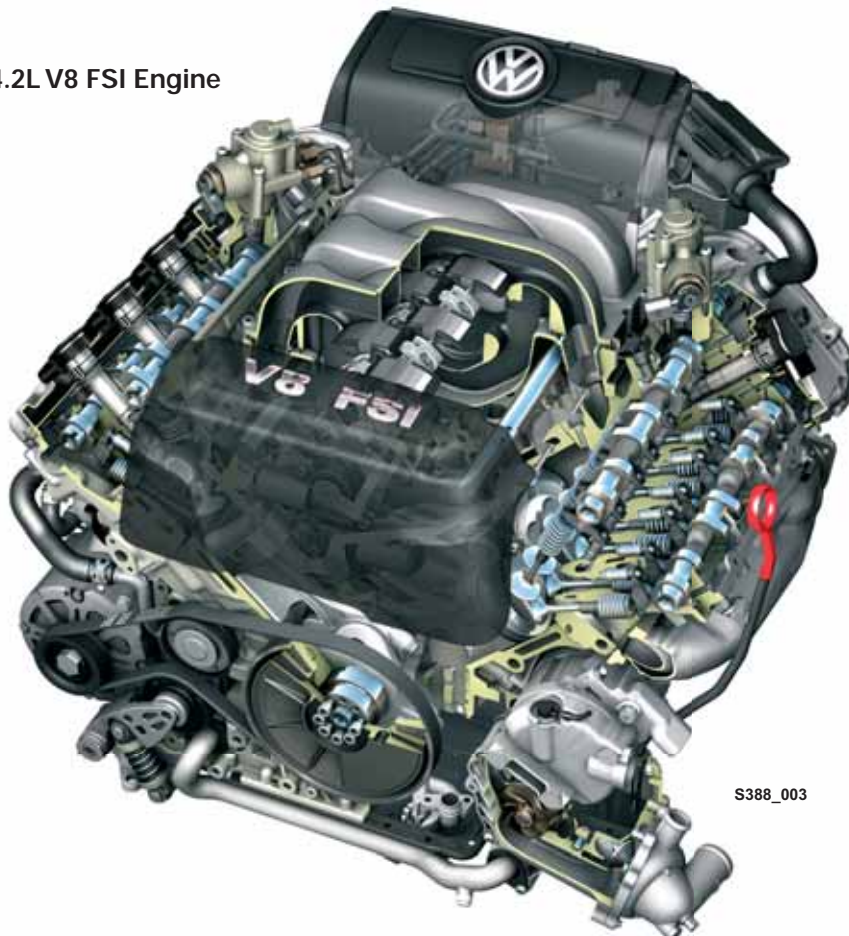
## Technical Features

The 4.2 Liter V8 4V FSI engine is the most recent example of the Fuel Straight Injection engines from Volkswagen. It is the successor to the 4.2 Liter V8 5V engine and is used in the Touareg.

The 2.0 Liter turbocharged FSI was the first engine introduced by VW with direct injection technology. Following its success, the 3.6 Liter V6 FSI and 4.2 Liter V8 4V FSI were introduced.

- Bosch Motronic MED 9.1.1
- Fuel Straight Injection (*FSI*)
- Electronic Throttle (*Electronic Pedal Control*)
- Two hot film mass airflow sensors
- Electronically regulated cooling system
- Adjustment of the variable intake manifold and intake manifold flap change-over by means of an electric motor
- Continuous inlet and exhaust camshaft timing adjustment
- Two-piece cylinder block
- Chain drives for camshafts and ancillary drives mounted on the flywheel side of the engine
- Spur gear drive for ancillary units
- Secondary air injection system

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