



## Jaguar 2.7L V6 Diesel Engine Best-In-Class NVH

### FEV Responsibilities: NVH and Combustion System Development Support

From the outset, the 2.7L V6 diesel engine, jointly developed by Ford, PSA-Peugeot Citroen and Jaguar, was intended to deliver leadership levels of refinement in the premium vehicle segment.

The engine was launched in 2004 and is EU IV-capable, while delivering best-in-class NVH performance. FEV was asked to contribute to the NVH and combustion system development. The final engine design includes a large number of the NVH and combustion system changes that were recommended by FEV.

### NVH Development

- Continuous CAE analysis (design assessment and dynamic structure optimization)
- NVH testing (validation, noise source identification and fine-tuning)

### Combustion development (single cylinder engine)

- Fuel injection system
- Piston bowl matching
- Calibration settings

### Cooling Simulation Development

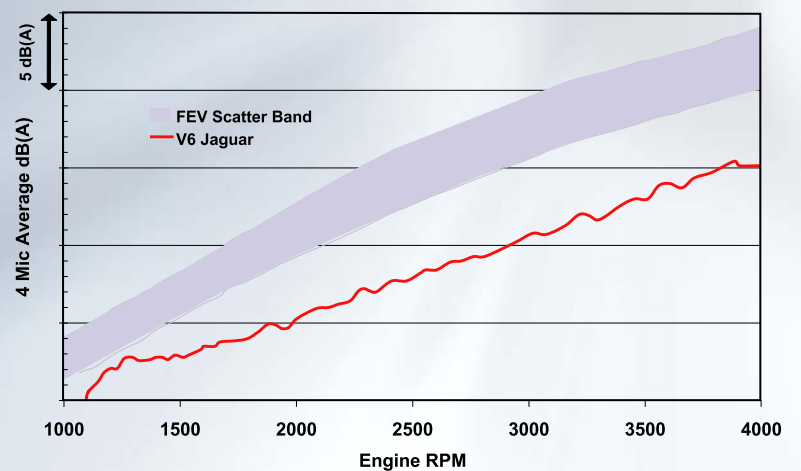
- Cooling circuit simulation for various applications of the engine (Jaguar / Land Rover / PSA-Peugeot Citroen)

### Engine Technical Specifications

Engine	Ford/PSA/Jaguar V6 Diesel
Displacement	2720 cc (166 cubic inches)
Bore and Stroke	81.0 x 88.0 mm (3.19 x 3.46 in)
Maximum Power	152 kW (204 hp)
Maximum Torque	440 Nm (325 lb ft)
Compression Ratio	17.3:1



V6 Motored 4 Mic Average Radiated Noise



V6 Full Load 4 Mic Average Radiated Noise

