

# FORD 2.0-LITRE ECOBLUE DIESEL ENGINE



Go Further

Ford EcoBlue is a completely new generation of high-performance diesel engines for Ford cars and commercial vehicles. Powerful, clean, refined and extremely efficient with low running costs, Ford EcoBlue diesels build on the performance and technology of Ford's award-winning EcoBoost petrol engines. Ford EcoBlue is launched as a state-of-the-art 2.0-litre 4-cylinder diesel offering up to 170 PS.

## KEY CUSTOMER BENEFITS

- Fuel consumption and CO<sub>2</sub> emissions cut by up to 13 per cent
- Improved performance with low-rpm torque increased by 20 per cent
- Enhanced refinement with radiated noise at idle reduced by 4 decibels
- Ultra-low exhaust emissions in line with Euro Stage VI standards

## KEY DATA

Type	Direct injection turbo-diesel
Cylinders	4 in-line
Capacity	1,995cc
Bore x Stroke	84 x 90 mm
Comp. ratio	16.5:1
Max power	105–170 PS (77–125 kW)
Max torque	360–405 Nm

### HIGH-PRESSURE DIRECT FUEL INJECTION

- Latest generation 2000 bar common rail injection
- 8-hole piezo injectors
- Capable of up to 6 injections per cycle
- Gear-driven high efficiency aluminium injection pump

### COMPUTER-OPTIMISED STRUCTURE

- Compact high-strength cast iron block
- Ladder frame bottom end construction
- Moulded acoustic cover for cylinder head
- Design optimised for minimum noise and vibration

### STATE-OF-THE-ART LOW-FRICTION DESIGN

- Downsized 2.0-litre design with optimised bore/stroke ratio
- Offset crankshaft layout to reduce piston side load
- Minimised main bearing sizes
- Belt-in-oil camshaft and oil pump drive belts
- Optimised valve-train and camshaft module

### ADVANCED ALUMINIUM CYLINDER HEAD

- 16-valve DOHC layout
- Twin cooling jackets for increased stiffness
- Compact, lightweight one-piece camshaft module
- Integrated inlet manifold
- Optimised low-friction bearing design

### HIGH-PERFORMANCE VARIABLE GEOMETRY TURBOCHARGER

- Advanced low-inertia design for increased low-end torque
- Maximum wheel speed: 240,000 rpm
- High-precision compressor wheel machined from solid
- Gear-driven actuator for faster responses

### ULTRA-HIGH EFFICIENCY COMBUSTION CHAMBER

- Concept developed by Aachen research centre
- Innovative mirror-image intake design
- Optimised geometry for piston bowl and inlet/exhaust ports
- Maximum efficiency combustion process

### COMPREHENSIVE EXHAUST AFTER-TREATMENT

- Standard SCR catalyst with Urea injection for NO<sub>x</sub> reduction
- Close-coupled oxidation catalyst and particulate filter
- EGR channel integrated in cylinder head

