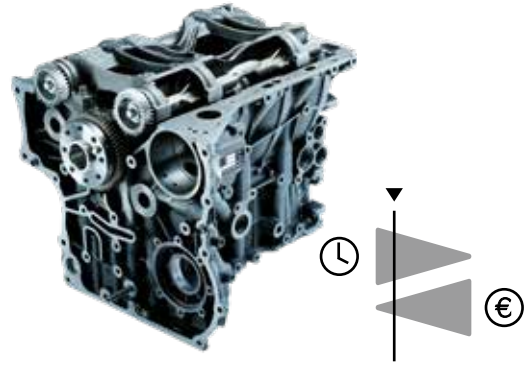


# Short block – the low-cost option.



- Cost-effective alternative with approx. 60% price advantage compared to the complete engine. High savings potential by reusing detachable components that are still functional.
- Practical option in case of engine damage when the cylinder head and other detachable parts can still be used.

## At a glance

### Package contents

- Piston
- Crankshaft
- Connecting rods
- Cylinder crankcase
- Various small parts

### Vehicle and engine model series

- Sprinter, Vito, Viano
- Engine model series: OM646, OM651

### Warranty

**2-year warranty** – may vary by country.

Please check the detailed information about product contents and part numbers in VeDoc/EPC/iParts or contact your Mercedes-Benz Partner. The pictures and product contents are shown as examples.

## Advantages

### Availability – rapidly back on the road

- **Reduced downtimes** thanks to prompt availability.
- **Secure delivery** in a special transport box.

### Cost advantage – replacement on a tight budget

- **Approx. 60% lower costs compared to replacing the entire engine** since engine components such as cylinder head, injection and all detachable components that are still functional are reused.
- **Attractive offer** for price-sensitive customers with their own workshop.

### New parts or new part standards – fitness program for your engine

- **Excellent smooth running characteristics** since all rotating components are finely balanced corresponding to the current technical status of new parts, e.g., crankshaft and camshaft.
- **High reliability, leak tightness and durability** since all wear parts and small parts are replaced with Mercedes-Benz GenuineParts, e.g., seals, bearing shells and pistons. The result is:
- **Less friction on pistons and shafts** ensures optimum smooth running characteristics, efficient fuel consumption and engine leak tightness.
- **Compliance with emissions regulations and improved longevity** because valve guides are always replaced and valve seat rings are reworked to the dimensions of the new part.

### Cleaning and examination – carefully cleaned and tested

- **All functional surfaces are carefully cleaned with environmentally friendly cleaning agents.** This also reveals any hidden damage. Components that are especially difficult to clean such as the crankcase are cleaned in a multistage industrial process and checked for cleanliness. Advantage: Consequential damage from “bearing seizures” resulting from dirt is avoided. Performance and fuel consumption reach the level of a new engine.
- **Detection of micro-damage on highly stressed components** using a special crack test procedure with fluorescent magnetic powder. This ensures longevity of the repaired engine parts.
- **Highly sensitive test procedures in order to comply with production tolerances in the area of  $\mu$ -meters.** While remanufacturing cylinder crankcases and crankshafts, the spherical shape of the piston ring on the main bearing and the connecting rod bearing must be between 2 and 4  $\mu$ m.