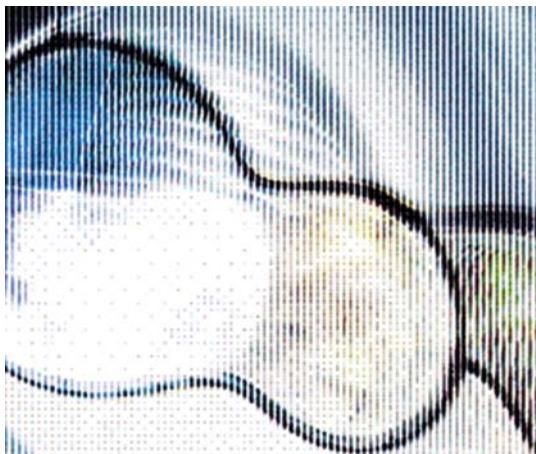


DAIMLERCHRYSLER



As at 04/03



**Powersystems • Industrial Engines
Maintenance and Repair
Series 457, 500 and 900**

Advanced Training

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Printed in Germany

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Note:

The term "employee" always refers to both male and female staff.

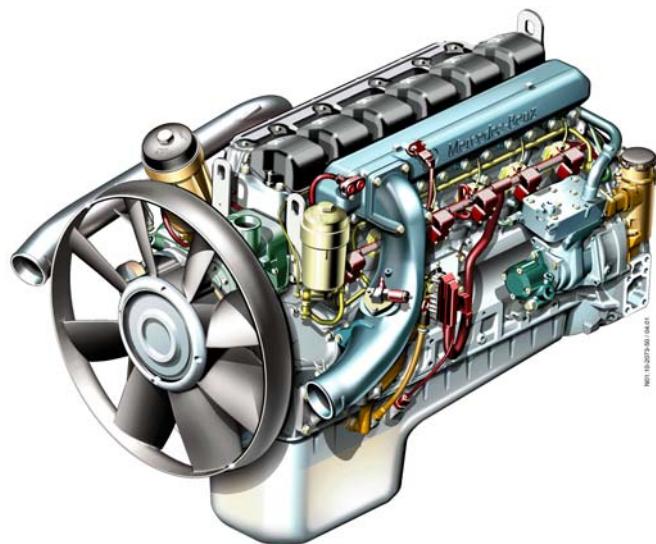
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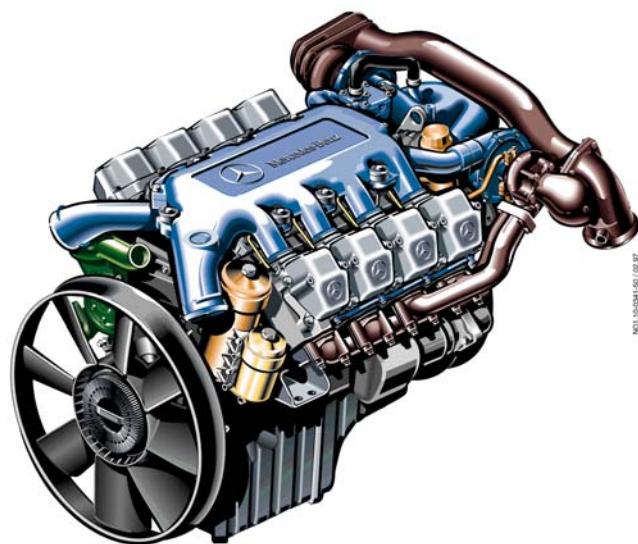
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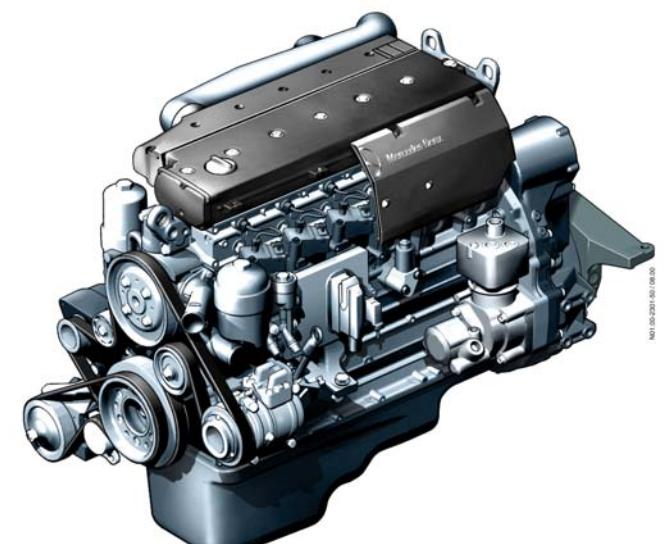
OM 457 LA



OM 502 LA



OM 906 LA



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The 500 engine model series is future-ready, and comes in V6 and V8 cylinder variants with 2 litre swept volume per cylinder.

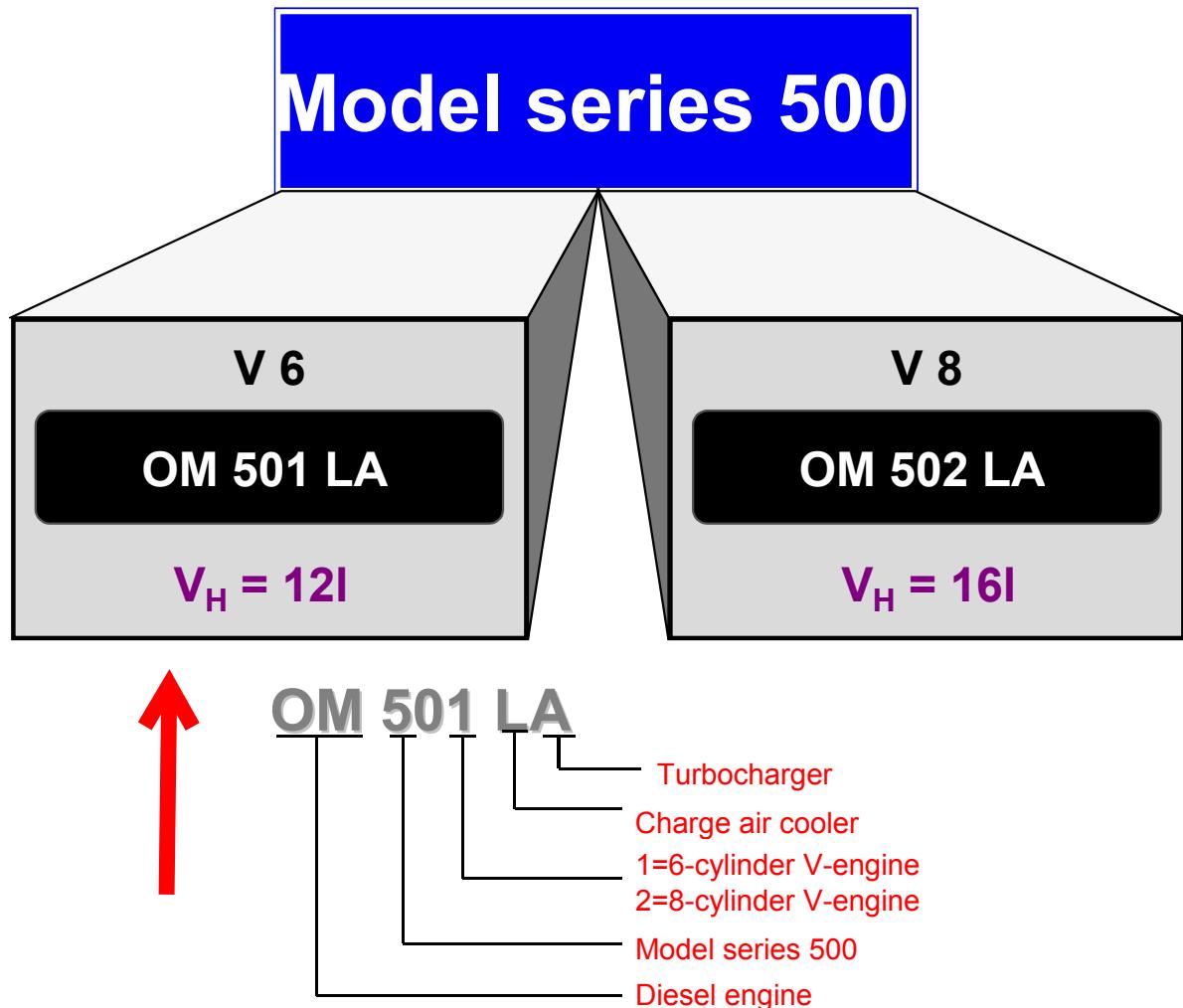
The sales designation is formed in the same way as the 400 model series:

6-cylinder engine: OM 501 LA

8-cylinder engine: OM 502 LA

At the same time, the OM 457 LA engine was developed with the same basic design as the V-engines.

The Series 2000 V12 and V16 MTU engines are derived from the BR 500, and are intended for industrial applications.





N01.10-2026-11



N01.10-2028-11

The development of the 500 series encapsulates all the knowledge and experience gained from the 1 million V-engines manufactured since 1969, when production of the OM 403 V10 engine began.

Series 500<>Technical features

07.05.2003

- ⇒ Outstanding **power output and torque characteristics** over the whole rpm range
- ⇒ Dynamic start-off characteristics and pulling power
- ⇒ Attractive power/weight ratio
- ⇒ Low **fuel consumption**
- ⇒ Enormous **potential**: the V6 engines meet the requirements of the highly popular 400 HP Class
- ⇒ High-pressure direct injection, **pump-line-nozzle system** with peak pressures up to 1,800 bar.
- ⇒ **Electronic engine control (MR)** with electronic system fixed to the engine, and extensive engine protection functions
- ⇒ Direct injection with centrally positioned **6-hole injection nozzle**.
- ⇒ **4-valve technology**
- ⇒ Useful engine brake rpm well over rated rpm, up to **2400 rpm**
- ⇒ Meets the emission legislation of **EURO 3 and EUROMOT/EPA Level 2**
- ⇒ Turbocharger with charge air cooling
- ⇒ V8 with 2 turbochargers
- ⇒ **Viscous fan clutch, electromagnetic fan clutch and high-speed fan drive** on the most powerful engines
- ⇒ Rated engine speed **1,800 rpm or 2000 rpm**
- ⇒ Low maintenance requirement
- ⇒ Long maintenance intervals
- ⇒ Engine oil and fuel filter located at the front, for easy maintenance
- ⇒ Maintenance-free belt drive
- ⇒ Can run on FAME / RME (rape methyl ester) or biodiesel, and engine oil changes are halved
- ⇒ High reliability and long runtime
- ⇒ Low number of component variants, as many parts are the same on both 6 and 8 cylinder engines
- ⇒ Rear engine power take-off ex works