



*Coach operations*

**DAF**



*A multi-national technology company*

# ***DAF, a PACCAR company***

*DAF Trucks N.V. is a technology company and the premier commercial vehicle manufacturer in Europe. DAF Trucks is a wholly-owned subsidiary of PACCAR Inc, the worldwide quality leader in the design and manufacture of premium light, medium and heavy-duty commercial vehicles. With the brand names Peterbilt, Kenworth and DAF, and an annual production of almost 150,000 trucks, PACCAR is one of the world's largest truck manufacturers.*



DAF has extensive component and final assembly facilities in Eindhoven, The Netherlands and Westerlo, Belgium for the production of the CF and XF series. Leyland Trucks in the U.K. (a PACCAR company) manufactures the company's LF and CF series of light and medium duty vehicles. Total annual production: over 50,000 vehicles. Built by people with a passion for quality.

DAF products are sold and serviced by a network of one thousand independent dealers throughout Europe, the Middle East, Africa, Australia, New Zealand and Taiwan.

All DAF products are of superior quality developed for a great variety of transport applications. By continuously listening to the customer, DAF has developed an exciting range of modern products, focused on providing the lowest operating cost per kilometre in the industry, excellent transport efficiency, and optimum comfort for the driver.





● Mount Vernon (PACCAR Technical Centre)

Renton

Seattle

St. Therese

Madison

Chillicothe

Denton

Mexicali

Leyland

Eindhoven

● St. Oedenrode (DAF Trucks proving ground)

Westerlo

Bayswater

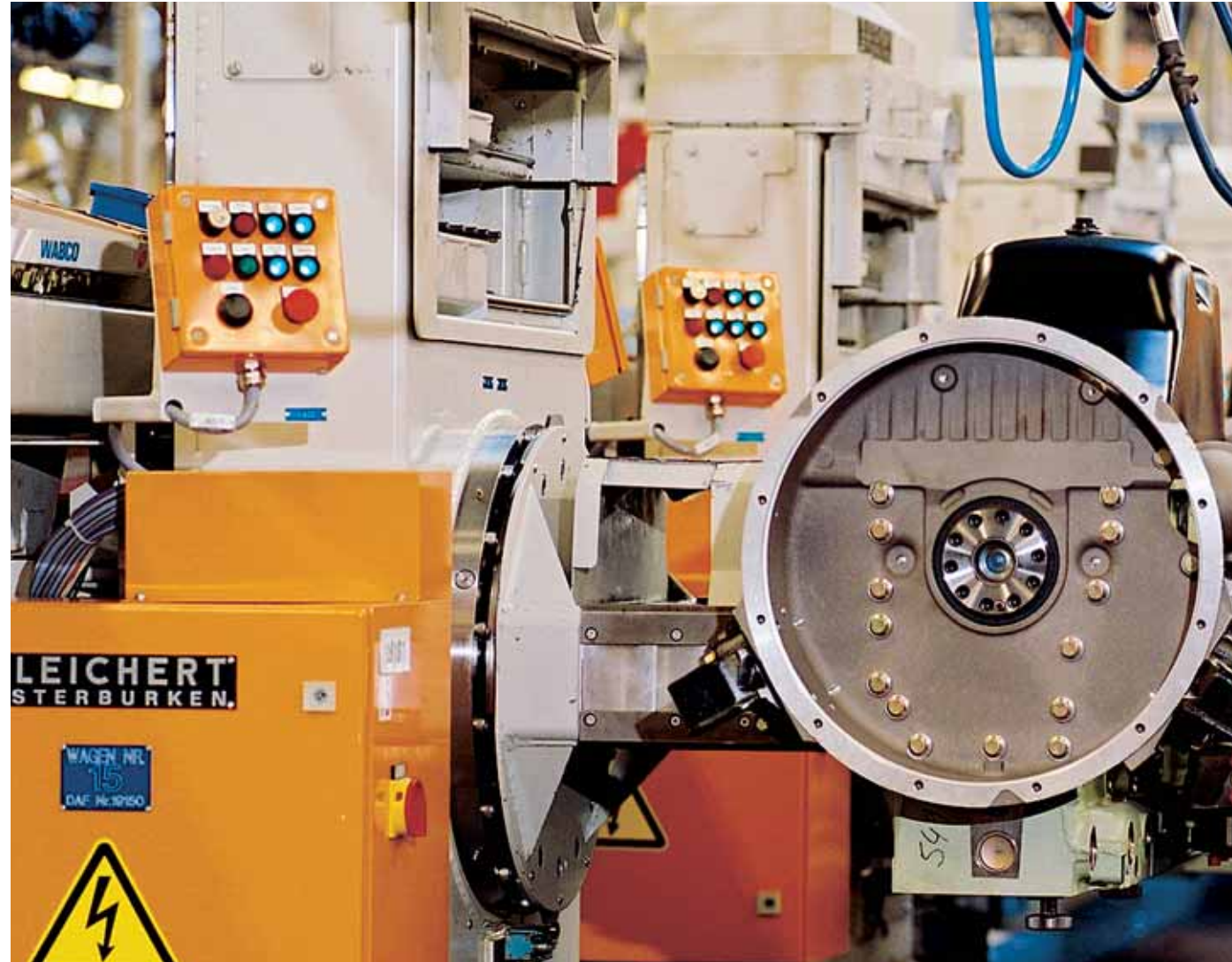


*Right first time, no waste, highest quality standards*

# ***Commitment to World Class Manufacturing***

*As a PACCAR company, DAF Trucks applies state-of-the-art technology to maintain the highest standards in development and manufacturing. Over the last few years, major investments have been made in all DAF factories. DAF trucks are built in world-class facilities by dedicated people, using high-quality materials and efficient processes.*

For the production of the new PACCAR PR and MX engines, the engine factory has been totally renewed, making it one of the most modern of its kind in the world. In the other factories too, major innovation programmes have been undertaken to achieve the highest efficiency and quality levels. DAF Trucks introduced World Class Manufacturing standards: everything right first time, with no unnecessary loss of energy or materials and with the highest conceivable quality. As a result, world-class products are manufactured in world-class factories.



*New range of efficient engines*

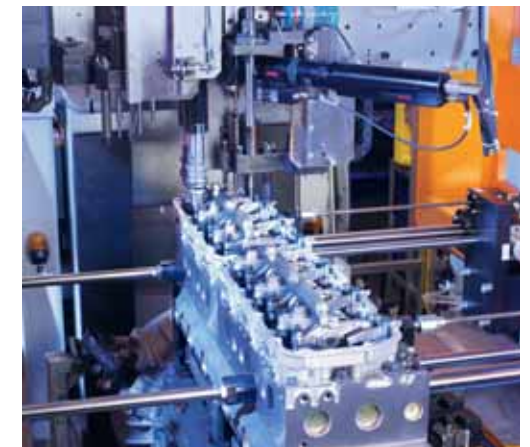
# ***Built-in quality***

*The all-new DAF-designed and produced PACCAR MX and PR engines combine excellent performance with economical fuel consumption.*

The use of high-quality materials such as Compact Graphite Iron for cylinder block and cylinder head and extensive function integration result in excellent reliability and durability. The inlet manifold, for example, is integrated in the cylinder head, while the oil filter, oil thermostat and oil cooler are combined in a single lubrication oil module. The unique SMART injection system, together with SCR catalytic converter technology, means that the new PACCAR MX and PR engines meet the stringent Euro 4 and 5 emission standards even without a soot filter.

The new 6-cylinder in-line engines with smart high-pressure injection, are cleaner and deliver high power and torque at low engine speeds.

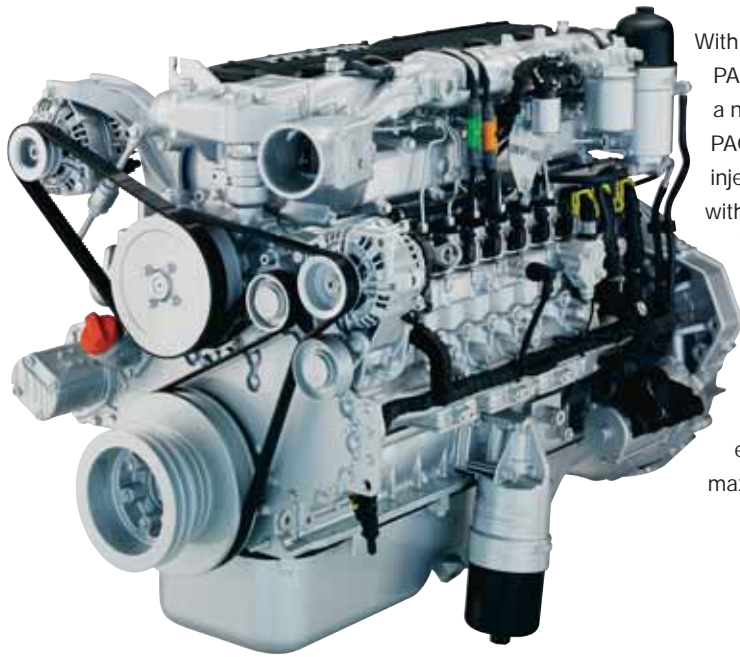
All new PACCAR engines are designed to offer the highest standards of economy, reliability and durability to please operators while comfortable power benefits the driver.



*Powered by choice*

# ***PACCAR PR engine***

*The 9.2 litre PACCAR PR 6-cylinder in-line engine with 24 valves is available in two power variants: 228 kW (310 hp) and 265 kW (360 hp).*

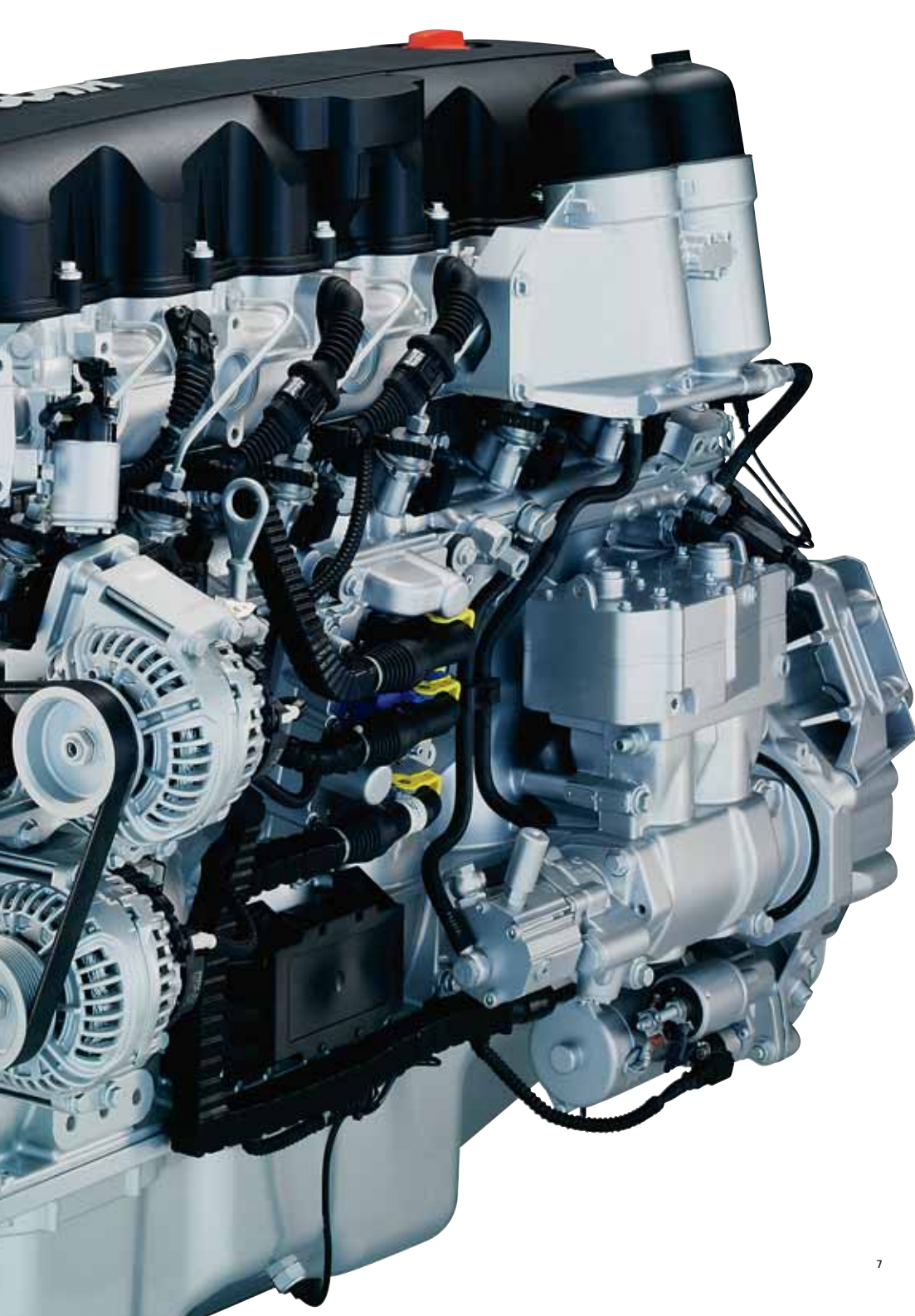


With a bore and stroke of 118 and 140 mm respectively, the PACCAR PR engine has a displacement of 9.2 litres and uses a number of technologies that are featured in PACCAR's new PACCAR MX engine such as SMART high-pressure fuel injection. The result is optimum engine performance with the lowest possible emission of harmful exhaust gases.

Valve and valve seats are made out of the same materials as for the PACCAR MX engine for even greater reliability and durability, resulting in low operating costs.

It's light weight (no more than 830 kg), high performance and excellent fuel consumption make the PACCAR PR engine an attractive solution for coach operators looking to maximise passenger/luggage capacity.





*The power to perform*

# **PACCAR MX engine**

*The 12.9 litre PACCAR MX 6-cylinder in-line engine with 24 valves is available in four power variants: 265 kW (360 hp), 300 kW (410 hp), 340 kW (460 hp) and 375 kW (510 hp).*

The 12.9 litre PACCAR MX engine series – developed and manufactured at DAF Trucks in Eindhoven – sets new standards in the 13 litre class. Following DAF tradition, it is a compact 6-cylinder in-line engine with a low own weight and favourable installation dimensions (1154 mm long, 1150 mm high and 789 mm wide).

The recently developed straight-six heavy duty diesel engine combines excellent performances with economical fuel consumption. The use of high-quality materials such as compact graphite iron for cylinder blocks and cylinder heads and extensive functional integration results in excellent reliability and durability. The inlet manifold is integrated in the cylinder head and the oil filter, thermostat, and cooler have been combined into a single module. The unique electronic SMART injection system, together with catalytic converter technology, means that the new PACCAR engine meets the stringent Euro 4 and Euro 5 emission standards without the need of a soot filter.

The 12.6 litre PACCAR MX 6-cylinder in-line engine with 24 valves is available with power outputs varying from 265 kW (360 hp) to 375 kW (510 hp).

A range ideally suited to meet the ever increasing demands for higher engine outputs, optimum capability in coping with other traffic, drive comfort and safety.

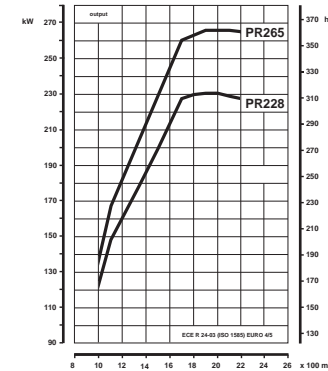
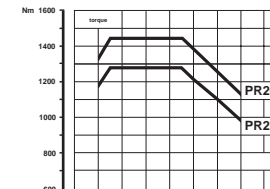
And more than a match for the heavier, high mileage sector such as 13 and 15 metre three-axle coaches and double deckers.

# Powered by choice

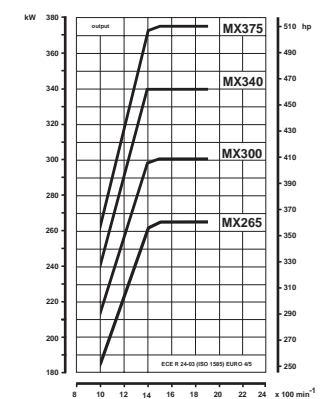
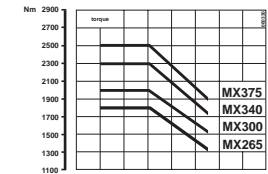
Engine	PR-228	PR-265	MX-265	MX-300	MX-340	MX-375
Maximum Power (kW)	228	265	265	300	340	375
Rpm at Pmax	2200	2200	1900	1900	1900	1900
Maximum torque (Nm)	1275	1450	1775	2000	2300	2500
Rpm at Tmax (from - till)	1700	1700	1410	1410	1410	1410

General Information	PR engines	MX engines
No. of cylinders and cylinder arrangement	6 in line, vertical	6 in line, vertical
Cycle	4 - stroke	4 - stroke
Bore (mm)	118	130
Stroke (mm)	140	162
Piston displacement (dm <sup>3</sup> )	9,2	12.9
Aspiration	Turbocharged and Intercooled	Turbocharged and Intercooled
Idle speed (rpm)	600 +/- 25	550 +/- 25
Max. no load governed speed (rpm)	2200 +/- 25	1900 +/- 25
Dry weight engine only (kg)	860	1085

PACCAR PR engines



PACCAR MX engines





## DAF Genuine Parts

# For optimum vehicle availability

*Whether maintenance is planned or unplanned, a coach or bus must spend the shortest time possible in the workshop.*

*We understand that time is money for our customers.*



Optimum availability of 'DAF Genuine Parts' is therefore vital. In fact, the PACCAR Parts Distribution Centres in Eindhoven (NL), Leyland (GB) and Madrid (E) send out parts every day to more than 1,300 delivery addresses right across Europe.

These distribution centres guarantee that every DAF Coach and Bus dealer and every DAF service point always has the fastest access to the right driveline parts for every DAF powered vehicle.



TRP, parts for coach, bus and workshop

# The one stop-shop



*TRP, the unique parts programme developed by DAF to provide Bus and Coach operators with a 'one-stop shop' facility for a current array of 31,000 maintenance products, is now available to the coach and bus sector.*

*Working alongside the DAF genuine parts programme, TRP includes a comprehensive range of 'workshop consumables' and 'All Makes' fast moving items such as filters, batteries and wiper blades applicable to coaches and buses.*

Working with leading suppliers means that the highest quality is assured. Purchasing policies have been developed to enable DAF dealers to offer competitive prices. Furthermore, all TRP items come with the standard international DAF warranty terms and conditions.



# 24 hour support, 365 days a year

*“Coaches powered by DAF engines will have the very best support anywhere in Europe,” that is the DAF promise. It is backed by a growing number of Bus and Coach Specialists which has emerged from the 1,000 DAF ITS service dealers, that cover all major routes and form a Euro-wide support network providing assistance for coaches 24 hours a day, 365 days a year.*

A single telephone call to the ITS centre is all that's needed to put DAF back-up into operation. At the other end of the line is a team that cannot only speak all European languages they also know what they are talking about when it comes to coaches. In fact, although some 70 per cent of problems are not even related to the drive-line DAF mechanics usually have the experience and know-how to find a solution. If they can't, they know who and where is the nearest specialist who can.

Importantly, coach assistance from ITS which is prioritized, also extends to the driver and his/her passengers. Arrangements can be made to carry out repairs when the coach is not in use (e.g. a hotel or restaurant). Similarly, in the event of a major breakdown, accommodation or a replacement coach can be organized. In short, whatever is needed to solve a problem or get a coach and its passengers back on the road with minimum delay. Often copied but never equalled, ITS is on stand-by day and night, 365 days a year.



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For the most recent information,  
contact your authorized DAF dealer.

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*driven by quality*



Environmental  
Management  
System

**DAF**  
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