

MX-11

EPA 2021

THE POWER TO MOVE YOUR BUSINESS AHEAD

HIGH-PERFORMANCE REDEFINED

The next time you look for a truck to make a positive difference in your bottom line, start with one powered by a PACCAR MX-11 10.8 L. engine. This compact workhorse delivers greater potential for profitability, especially in challenging, weight-sensitive applications.

With up to 445 HP and 1,700 LB.-FT. of torque at just 900 RPM, this 10.8 L. engine enhances performance, responsiveness and driveability – all while maximizing payload. It's perfect for the demands of pickup and delivery, line haul and heavy-duty vocational operations.

Updated for 2021, the PACCAR MX-11 engine features enhanced durability, reduced complexity, performance upgrades, increased downspeeding capability and more efficient, quieter combustion. The result: More power, longevity, uptime, ease of service and driver satisfaction – plus even better fuel economy compared to the EPA 2017 MX-11 engine.

The PACCAR MX-11 engine guarantees a smooth-operating, high-performance powertrain of unmatched capability, optimized for a seamless integration with the PACCAR 12-Speed Transmission and PACCAR 40K Axles.

GREATER RELIABILITY AND MAXIMUM UPTIME

PACCAR is an innovation company, forever advancing the state-of-the-art in heavy duty diesel engines. With the PACCAR MX engines for 2021, virtually every part of the combustion process – and each critical component that helps produce and contain it – was scrutinized, modified, and improved. The objective: To design and produce a heavy-duty engine that not only meets EPA standards and offers unprecedented fuel efficiency, but to also produce an engine that runs longer, performs better, and maximizes your productivity. Mile after mile, load after load, day in and day out.

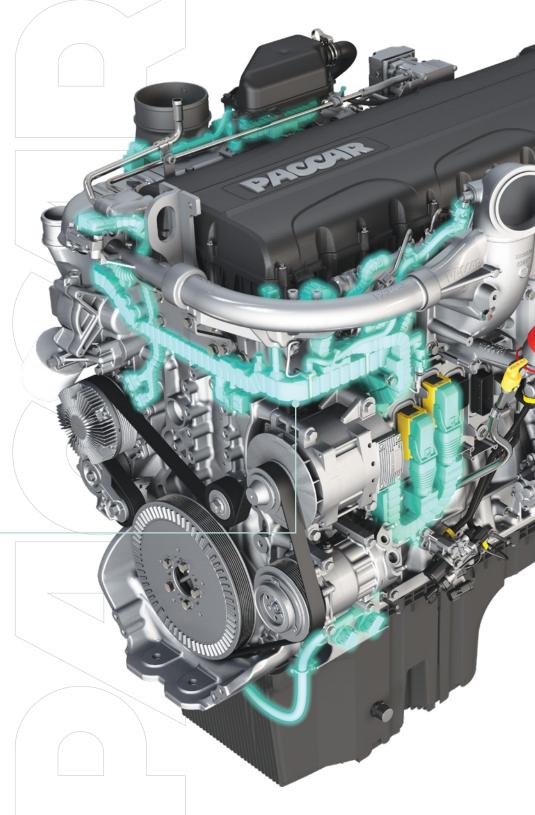
STRUCTURAL ENHANCEMENTS

The PACCAR MX-11 engine incorporates several design changes that strengthen load-bearing components. The crankshaft, for example, features longer connecting rods for improved durability and reduced vibration. A stronger, more robust cylinder head and block support increased peak firing pressures for better efficiency. And an optimized head gasket design improves reliability.

REDUCED COMPLEXITY AND PERFORMANCE UPGRADES

The new-generation MX engine challenges convention and pushes boundaries to produce a less complex, even easier-to-service solution that enhances dependability. For example, the fully-encapsulated engine harness – a PACCAR exclusive – provides much better protection against the elements. Improved routing reduces wiring congestion and block-mounted connectors ensure a stable, stress-free solution. Connections between the engine and vehicle were reduced and further protected.

The new combined engine and aftertreatment control module eliminates wiring harnesses and connectors for a streamlined, highly-reliable design. A constant power source improves the shut-down sequence and enables immediate battery disconnect.



ALL-NEW FUEL MODULE

The fuel module was optimized for service and improved performance. The primary and secondary fuel filters are engine-mounted for easier, faster access. Fuel flow has been simplified, including reduced connections to enhance fuel system reliability. A fuel blender and 12 V heater come standard for better cold weather performance. The mistake-proof filter design speeds filter exchanges and is also aligned with oil change intervals for reduced downtime. An improved fuel priming pump is easier to use during service.





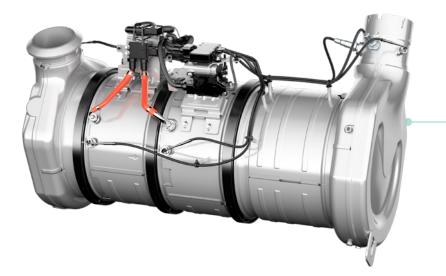
IMPROVED FUEL ECONOMY

Ultra-high combustion chamber pressure and lower friction components together with PACCAR's innovative synergetic piston design combine to reduce combustion noise, boost performance and increase fuel efficiency while significantly reducing your carbon footprint.

PACCAR's cutting-edge combustion engineering maximizes air flow into the cylinder and utilizes multi-pulse fuel injection to greatly improve combustion efficiency, reduce noise and provide thermal management for the aftertreatment system.

A smaller, more efficient turbocharger improves responsiveness without sacrificing power. Designed for all driving conditions, the turbocharger boosts power and torque at lower speeds for better driveability and more efficiency while delivering better fuel economy on the highway.





NEXT GENERATION AFTERTREATMENT SYSTEM

PACCAR engines are known for their clean, efficient, reliable and easily serviced aftertreatment systems. For 2021, PACCAR strengthens that commitment with refinements to further reduce particulates and NOx without sacrificing power, performance, or fuel economy.

PERFECTING THE PISTON

The piston is the beating heart of every engine – subjected to more heat, pressure and stress than any other part on the engine. The design, shape, construction and operation of the piston makes a world of difference.

PACCAR's new synergetic piston design with optimized bowl geometry achieves an unprecedented level of air/fuel mixing – enhancing combustion, fuel economy and emission control. The combustion process is also much quieter, substantially reducing engine noise inside and outside the cab.

- REDUCED COMPRESSION HEIGHT DECREASES THE FRICTION AND MASS OF THE ROTATING ASSEMBLY
- BETTER PISTON COOLING AND DESIGN REDUCES OIL CONSUMPTION
- DIAMOND-LIKE COATING ON PISTON RINGS IMPROVES DURABILITY AND WEAR RESISTANCE



LESS SCHEDULED DOWNTIME EQUALS MAXIMUM UPTIME

Extended service intervals offer a major competitive difference that can produce significant savings. Oil and fuel filter changes, for example, occur together at 75,000 mile intervals, much less frequently than competitive engines.

Each PACCAR MX engine also comes standard with factory-installed remote diagnostics – purposeful technology that helps you monitor engine performance.

Quicker-to-fix, more serviceable components can greatly reduce shop time and get you on your way more quickly. Fuel and oil filters, for example, are mounted above the frame rail for quick and easy access and replacement.

When you need genuine parts and expert service, PACCAR's expansive support network – with more than 800 PACCAR MX service locations throughout North America – means you are never far from quality service and support for your PACCAR powered vehicle.

MAINTENANCE INTERVALS

MAINTENANCE ITEM ¹		MI.	KM.
Fuel Filter	Normal/Line Haul < 20% Idle Time	75,000	120,000
	Normal/Line Haul > 20% Idle Time	50,000	80,000
	Severe/Vocational Duty	30,000	48,000
Oil and Filter	Normal/Line Haul < 20% Idle Time	75,000	120,000
	Normal/Line Haul > 20% Idle Time	50,000	80,000
	Severe/Vocational Duty	30,000	48,000
Coolant Filter		300,000	480,000
DEF Filter		300,000	480,000



WORLD-CLASS TECHNOLOGY AND DURABILITY TESTING

When it comes to maximizing uptime, few engine manufacturers can outdistance the PACCAR MX, one of the first heavy-duty truck engines to achieve the industry's B10 design standard. Ninety percent of all PACCAR engines will run to one million miles* without a major overhaul – reflecting unprecedented durability, productivity and longevity.

State-of-the-art development centers keep PACCAR on the leading edge. Prior to its introduction, the PACCAR MX-11 EPA 2021 final design underwent million-mile endurance testing to ensure high-value performance in the real world.

MX-11 2021 ENGINE CHART

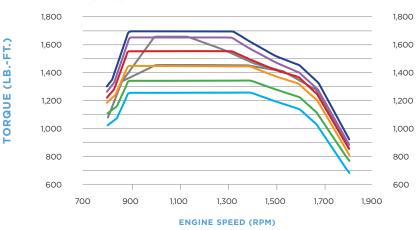
PEAK HORSEPOWER

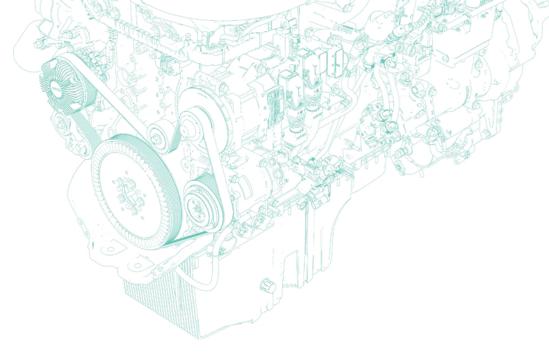
R PEAK TORQUE (LB.-FT. @ RPM)

445	1,700 @ 900	
430MT ³	1,450/1,650 @ 900	
430	1,650 @ 900	
415	1,550 @ 900	
400	1,450 @ 900	
375	1,350 @ 900	
355	1,250 @ 900	
³ Multi-torque rating		



TORQUE





MORE EFFICIENT POWER WITH IMPROVED DOWNSPEEDING

The PACCAR MX-11 offers a new higher horsepower rating - 445 HP/1,700 LB.-FT. - which increases the power to weight ratio for maximum performance and load hauling capability in a highly efficient small engine package. Exactly what you need to move your business ahead.

BEST-IN-CLASS WARRANTY

As you might expect, PACCAR MX-11 engines are backed by one of the strongest warranties in the industry and available with extended protection plan options to meet your precise business and application requirements.

PACCAR MX ENGINE STANDARD WARRANTY

Base Warranty ⁴	2 YRS./250,000 MI. (400,000 KM.)
Towing⁵	2 YRS./250,000 MI. (400,000 KM.)
Aftertreatment	2 YRS./250,000 MI. (400,000 KM.)
Major Components	5 YRS./500,000 MI. (800,000 KM.)

⁴Extended protection plans available

⁵Base Engine Warranty includes towing for warrantable failures. Reference warranty document for terms and conditions.

HORSEPOWER (HP)

RATINGS

WE'RE WITH YOU ALL THE WAY

When you need genuine parts and expert service, PACCAR's expansive support network will get you back on the road fast. With hundreds of PACCAR Engine dealerships throughout North America you are never far from quality service and support when you buy a PACCAR powered vehicle. Expect comprehensive warranty coverage, a hassle-free process and expedited parts and service for critical downtime situations.

VISIT WWW.PACCARPOWERTRAIN.COM TO FIND YOUR LOCAL DEALER

PACCAR Inc. - P.O. Box 1518, Bellevue, WA 98009

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PACCAR POWERTRAIN