



DASEKE SHIPPERS' CONFERENCE

PATRICK DEAN

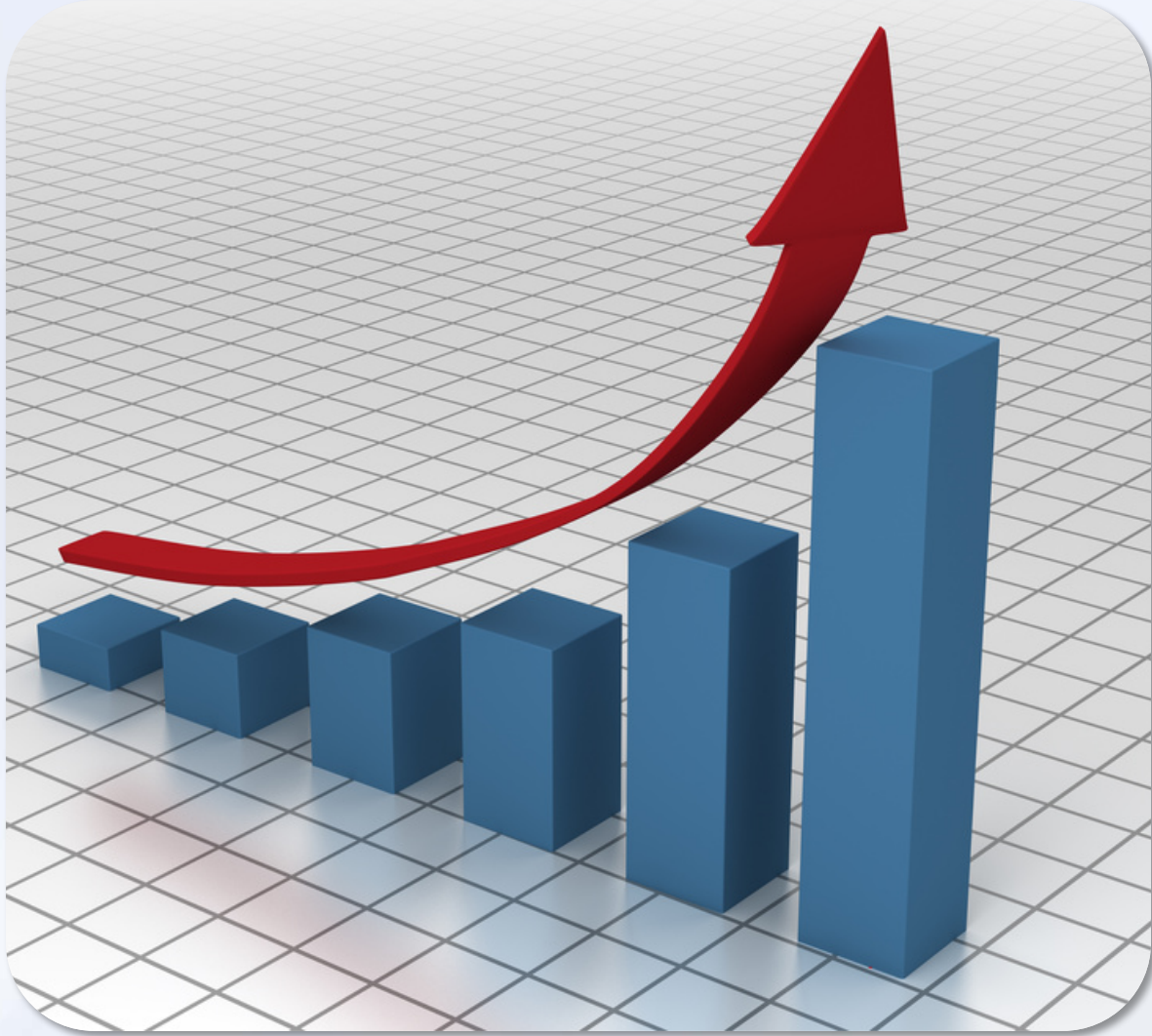
KENWORTH CHIEF ENGINEER



THE DRIVER'S TRUCK



TECHNOLOGY SHIFTS

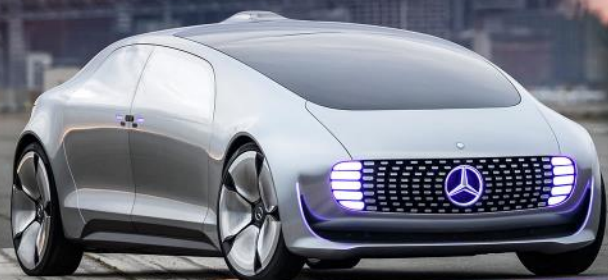


Driver Assistance Systems

Fossil Fuel Replacement

Connectivity

Autonomous Landscape



Automotive Industry

Trucking Industry

ADAS TECHNOLOGY AT KENWORTH



Automatic Emergency Braking



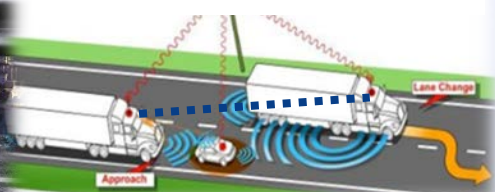
Traffic Jam Assist



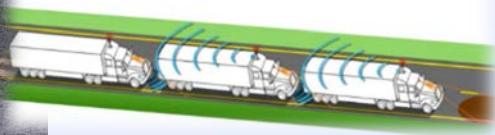
Lane Keeping Assist



Vehicle to Vehicle



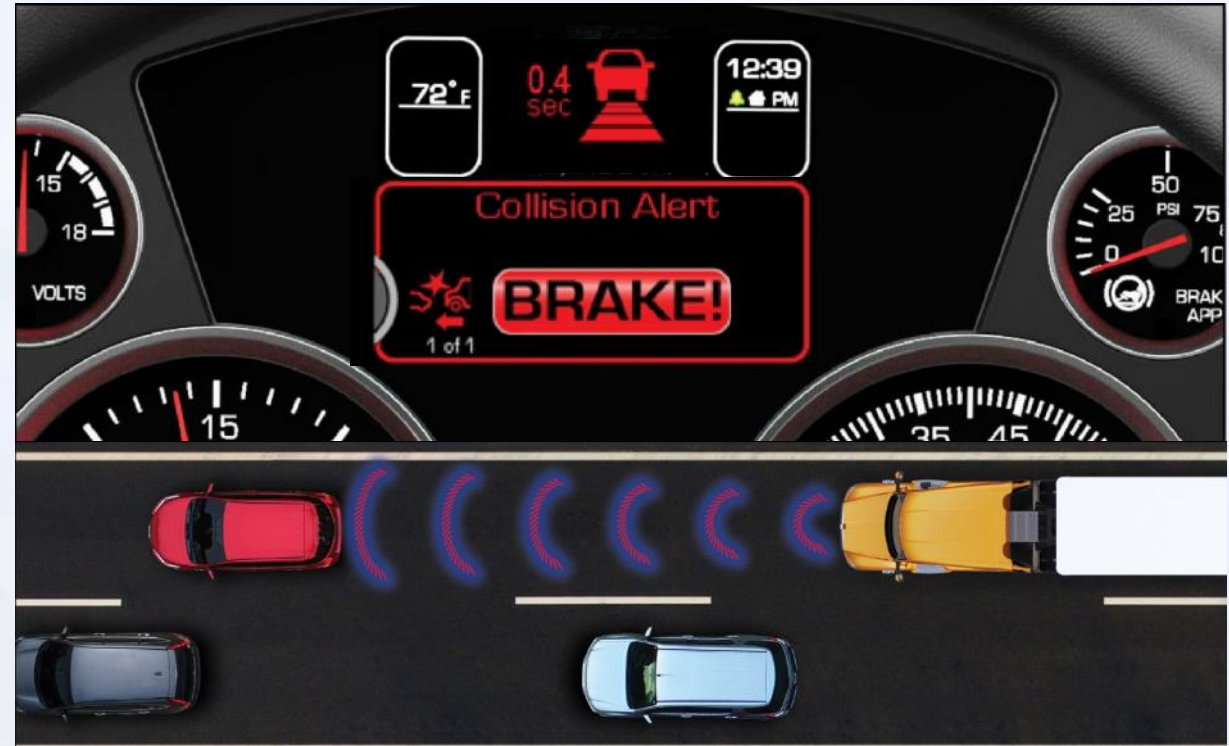
Platooning



BENDIX WINGMAN ADVANCED: STANDARD ON T680



- Adaptive Cruise Control



- Collision Mitigation

FOSSIL FUEL REPLACEMENT

Technology Drivers

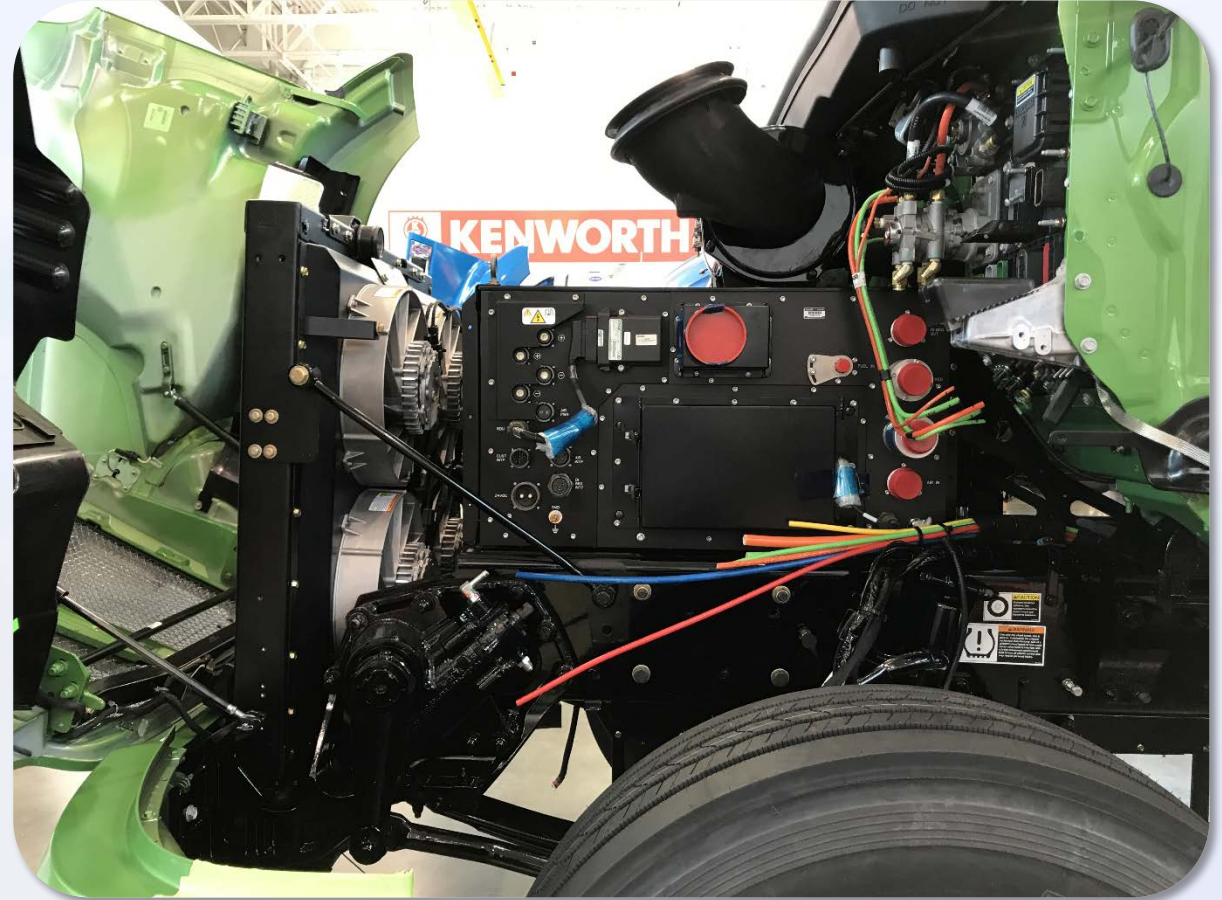
- Regulation
- Environmental Awareness
- Cost

Powertrain Configurations

- Mild-Hybrids
- Hybrid Diesel / Electric
- Full Electric

Power Source Options

- Hydrogen Fuel Cells
- Natural Gas Turbines
- Plug-In



ADVANCED POWERTRAIN

Hydrogen Fuel Cell Hybrid



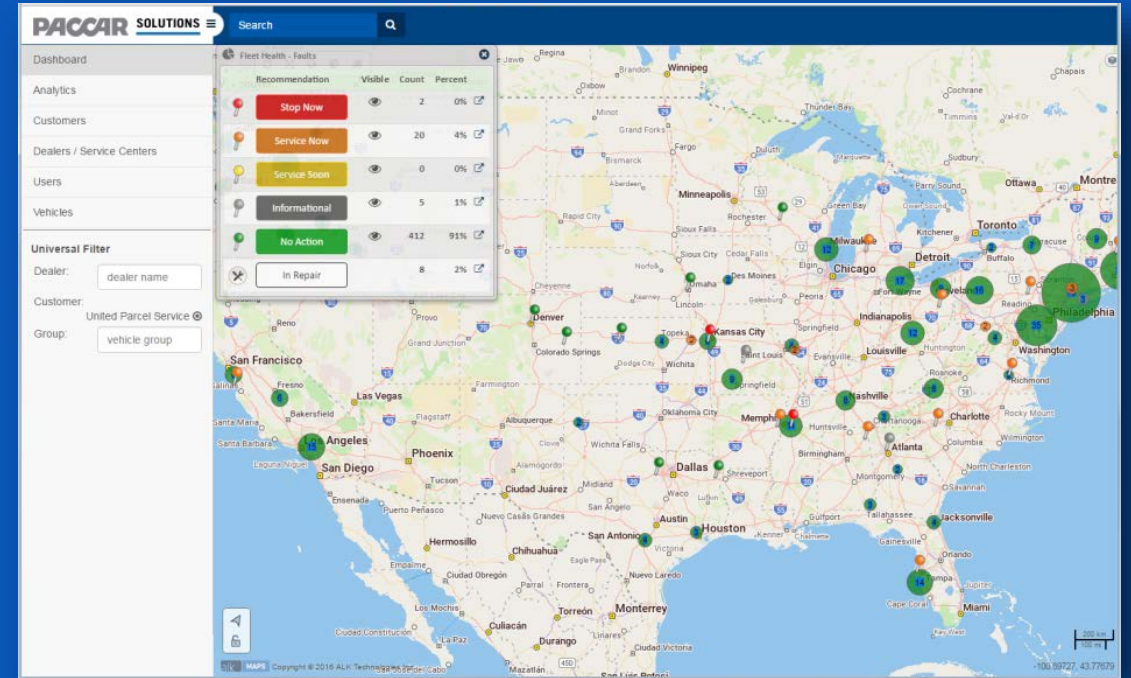
Near Zero Emission Natural Gas Hybrid



30-Mile Zero Emission
150-Mile Total Range

Plug-In Capability

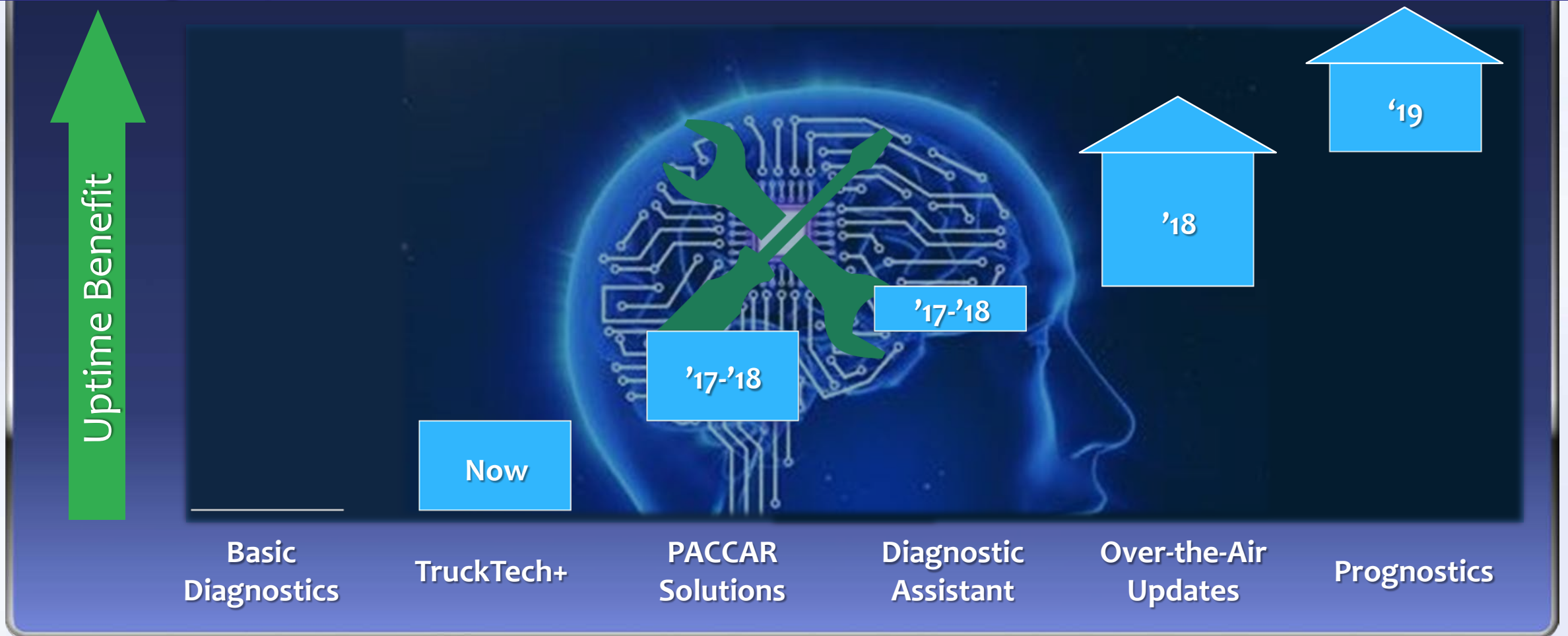
2018 Field Test



50,000 Trucks Connected
3 Billion Miles

SERVICE EXCELLENCE AND TECHNOLOGY

Technology Impact



EFFICIENCY IMPROVEMENTS

Powertrain

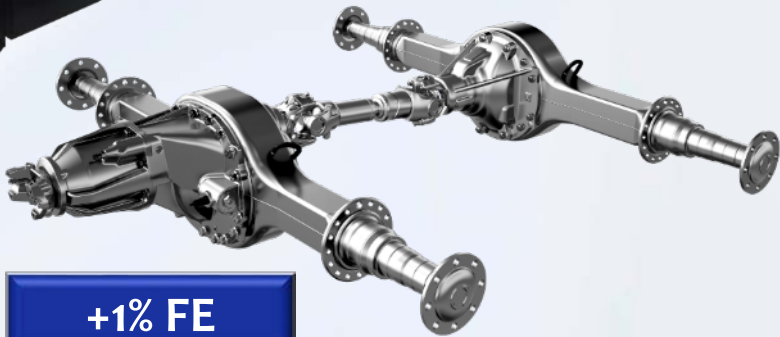
3-4% FE



1-2% FE



Predictive
Features



+1% FE

Aerodynamics

1% FE



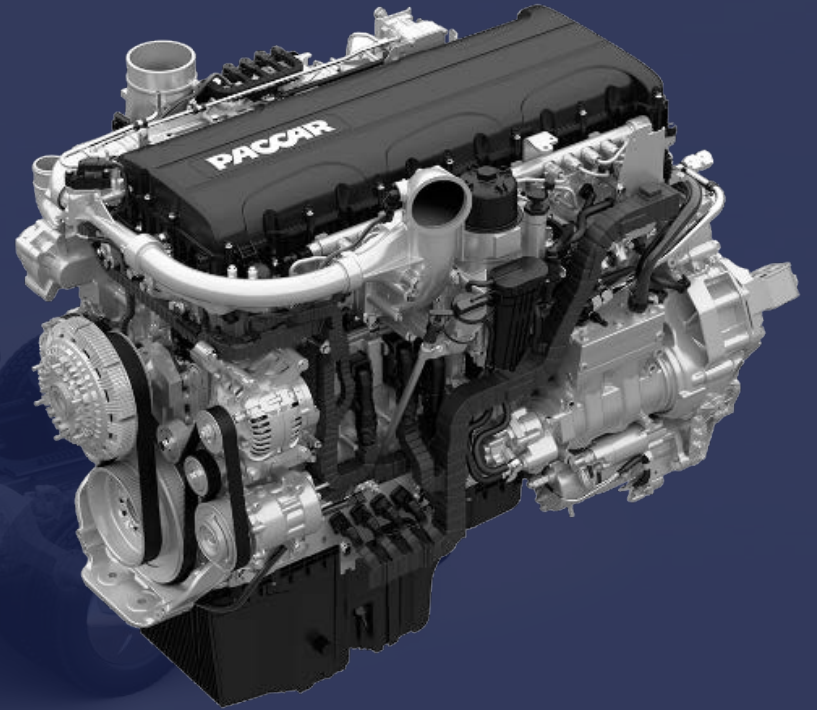
Kicked Out
Partial Fairing

Wheel Well
Close Outs

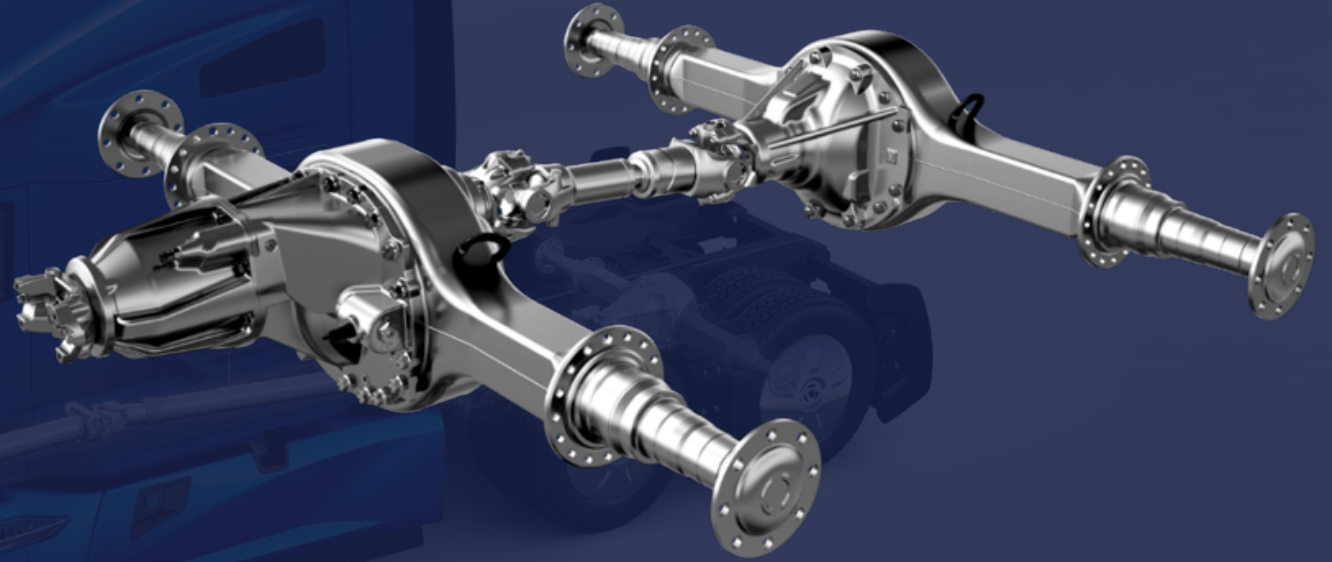


0.5-1% FE

- Increased MX-11 Torque to 1650 lb-ft
- Increased MX-13 Power to 510 HP
- Improved Fuel Economy – 4%
- Single Can Aftertreatment
- Weight Saving – 150 lbs.
- 75k Extended Service Intervals



- Linehaul Optimized
- Proprietary Design Features
- 1% Fuel Economy Increase
- 150 lb Weight Saving



THANK YOU

Patrick Dean
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T680C
Day Cab

T680C
52" Mid-Roof

T680C
76" Mid-Roof

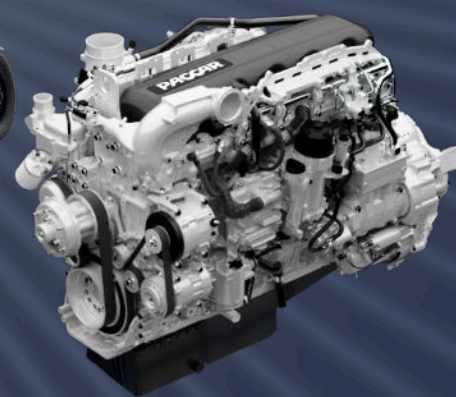
T680C
76" High-Roof



T880
40" Mid-Roof

T880
Day Cab

T880S
Set Forward Axle



PACCAR MX13



PACCAR MX11