



## An Innovative Way to Get Better Fuel Economy

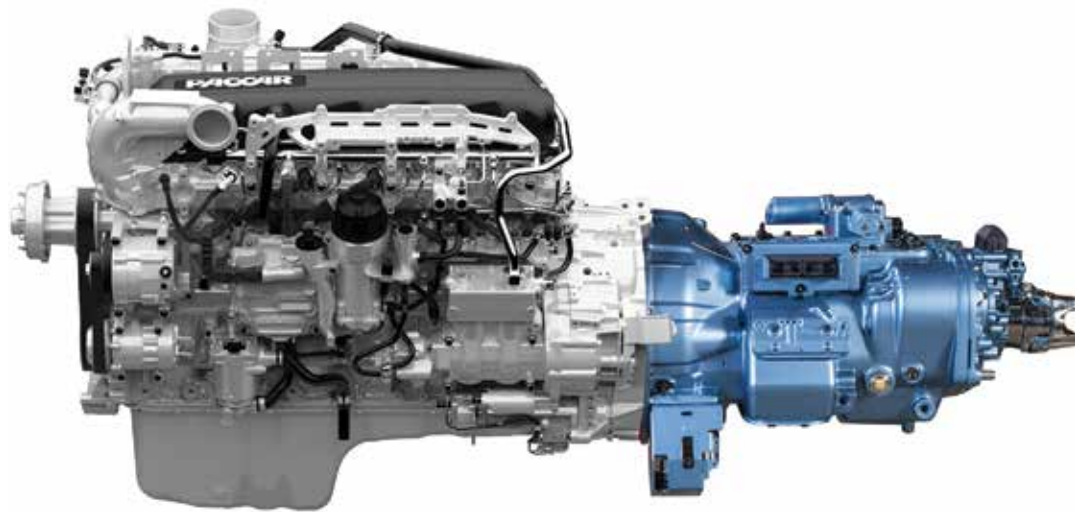
### Introducing the Most Advanced Eaton and Kenworth Powertrain Available

Kenworth and Eaton have collaborated to exclusively deliver a fully-integrated powertrain with exceptional performance and fuel economy.

The PACCAR MX-13 engine and Eaton Fuller Advantage™ 10-speed automated transmission share critical data including engine torque and operating gear.

Precise engine and transmission communications are combined with proprietary control logic to further enhance downspeeding in both overdrive and direct operation – which uses less fuel.

Error-free, guess-proof shifting makes every driver in your fleet as efficient as your best driver, saving you money on every haul.



Kenworth and Eaton's exclusive fully-integrated powertrain delivers exceptional performance and fuel economy.

### Transmission Special Features and Benefits

- Small-step ratio in 9th and 10th gear places the engine in a more fuel efficient operating range during a down shift

- Weight savings of up to 82 pounds
- Precision lubrication system increases reliability by eliminating the need for a transmission cooler

- Optimized shift calibration unique to the PACCAR MX-13 engine blends performance and fuel economy



Powering Business Worldwide



# Kenworth & Eaton Powertrain

## An Inventive Transmission Design

The Eaton Fuller Advantage transmission features “precision lubrication” technology that reduces churning losses, further enhancing fuel economy. Precision lubrication technology also eliminates the need for a cooler in most applications, which reduces weight as well as increases reliability.

The elimination of the cooler, together with extensive use of aluminum on select components, all adds up to an 82-pound [37 kg] weight savings versus the UltraShift® PLUS LAS base model.

## Helps Make Every Driver Perform Like Your Best

This powertrain package makes it easier for training new drivers. It's easy to drive with smooth, automated shifting. Your drivers concentrate on the road and traffic ahead, not shifting. There's less driver fatigue and fewer clutch-related and shifting related wear issues. Plus, this powertrain includes a Hill Start Aid that helps prevent rollbacks. This reduces risk and simplifies operation for both inexperienced and experienced drivers.

## Warranty for the Long Haul

The PACCAR MX-13 base warranty coverage is 2 years/250,000 miles (402,336 km). Several extended coverage plans are available.

Check with your Kenworth dealer for details.

The Fuller Advantage Series transmission is warranted in linehaul applications for 5 years/750,000 miles (1,200,000 km) when using PS-164 Rev 7 oil. Extended protection plans are also available. All backed by Roadranger support. For warranty details, see Eaton warranty guide TCWY0900 on [www.roadranger.com/warranty](http://www.roadranger.com/warranty).

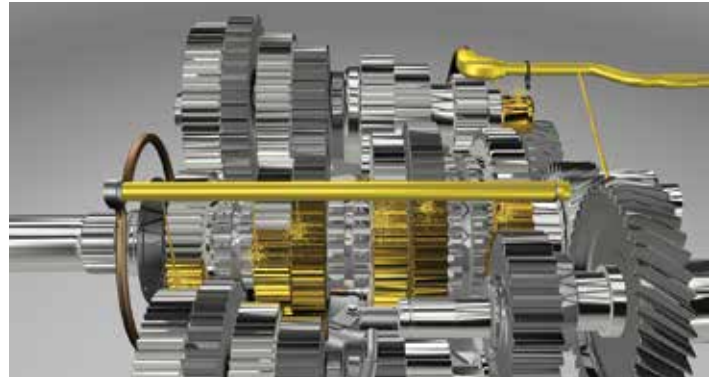
## Application Guidelines

- All truck orders require application approval
- Canadian and U.S. linehaul and regional haul trucks only
- Max GCW at launch is 80,000 lbs [36,287 kg]
- Engine cruise speeds of 1150 RPM or higher at the fleet's intended cruise speed
- Axle consistent with intended cruise speed (2.64 – 2.93 typical)

All other current automated transmission guidelines remain the same as published in TRAG2600.

## RECOMMENDED RPM BAND @ CRUISE SPEED

1150-1300 RPM



Precision lubrication system eliminates the oil cooler for most applications and improves transmission efficiency.

MODEL	POWER HP (KW)	PEAK TORQUE LB-FT [NM] @RPM
<b>Eaton FAO-16810S-EP3</b>		
PACCAR MX-13 455	455 [339]	1650 [2237] @ 1000
PACCAR MX-13 485	485 [360]	1650 [2237] @ 1000
<b>Eaton FAOM-15810S-EP3*</b>		
PACCAR MX-13 430	430 [321]	1550/1750 [2102/2373] @ 1000
PACCAR MX-13 455	455 [339]	1550/1750 [2102/2373] @ 1000

\*+200 lb-ft. [271 Nm] in top two gears

## Specifications

Power Take-Offs:

- 2 SAE standard openings
- Right side, regular duty, 6-bolt. Bottom, heavy-duty, 8-bolt

PTO Drive Gears:

- Right: 6 bolt; 45-tooth; 6/8 pitch gear. Left: 8 bolt; 47-tooth; 6/8 pitch gear turn at .79 engine speed

Oil Capacity:

- Approx. 16 pints [7.57 liters]

Transmission Controller:

- Current Gen 3

## Ratios and Steps

GEAR	RATIO	% STEP
10th	0.796	26
9th	1.00	42
8th	1.42	43
7th	2.03	39
6th	2.83	40
5th	3.97	26
4th	4.98	42
3rd	7.06	43
2nd	10.12	39
1st	14.11	
Hi REV	3.43	
Lo REV	17.12	
Overall	17.7	

**Note:** Features and specifications listed in this document are subject to change without notice and represent the maximum capabilities of the products with all options installed. Although every attempt has been made to ensure the accuracy of information contained within, Eaton makes no representation about the completeness, correctness or accuracy and assumes no responsibility for any errors or omissions. Features and functionality may vary depending on selected options.

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BACKED BY

**Roadranger**

SUPPORT

**Eaton Fuller Advantage transmissions are backed by Roadranger support – for spec'ing or service assistance, just call 1-800-826-HELP (4357) or visit [eaton.com/roadranger](http://eaton.com/roadranger)**

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