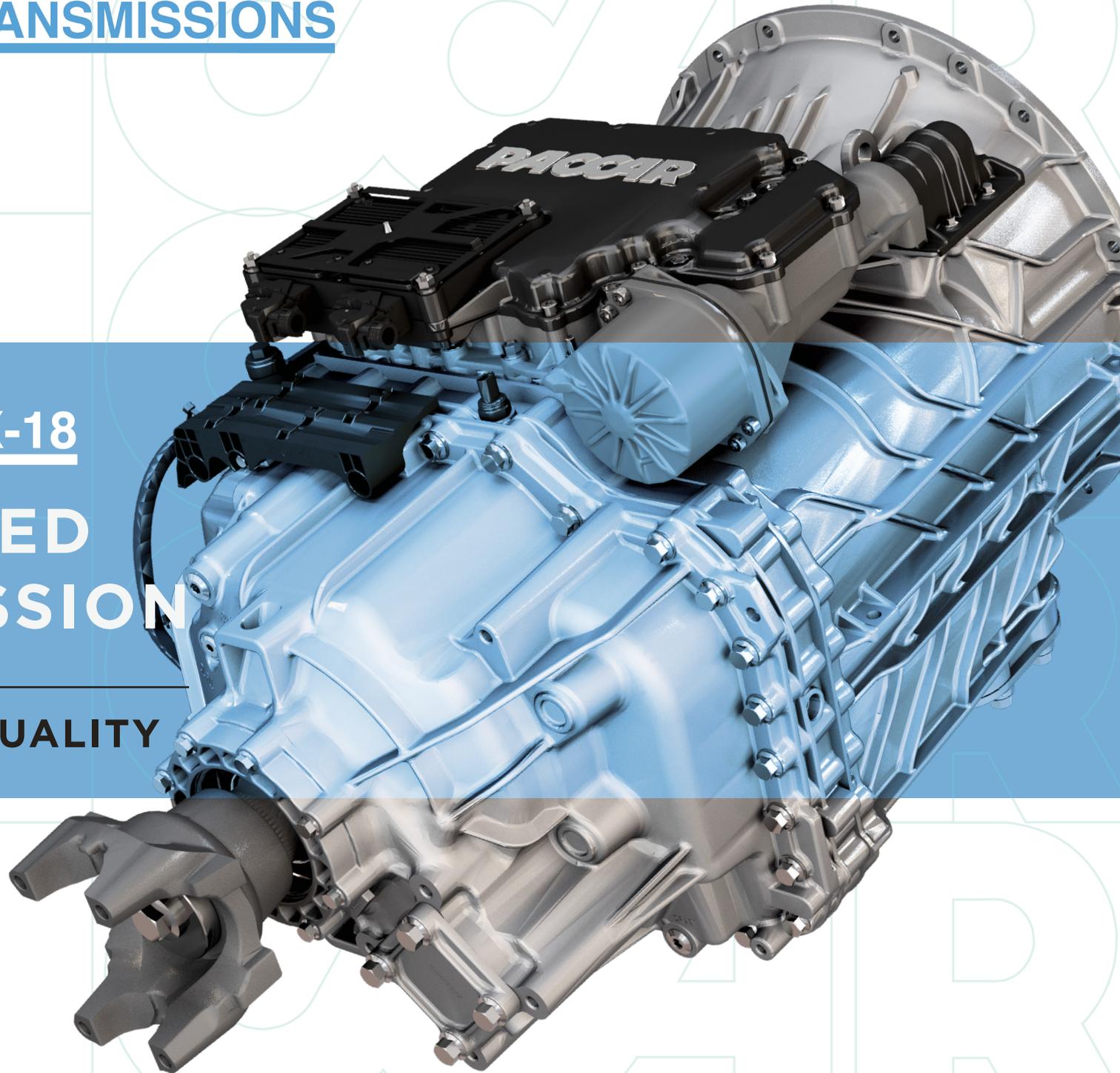
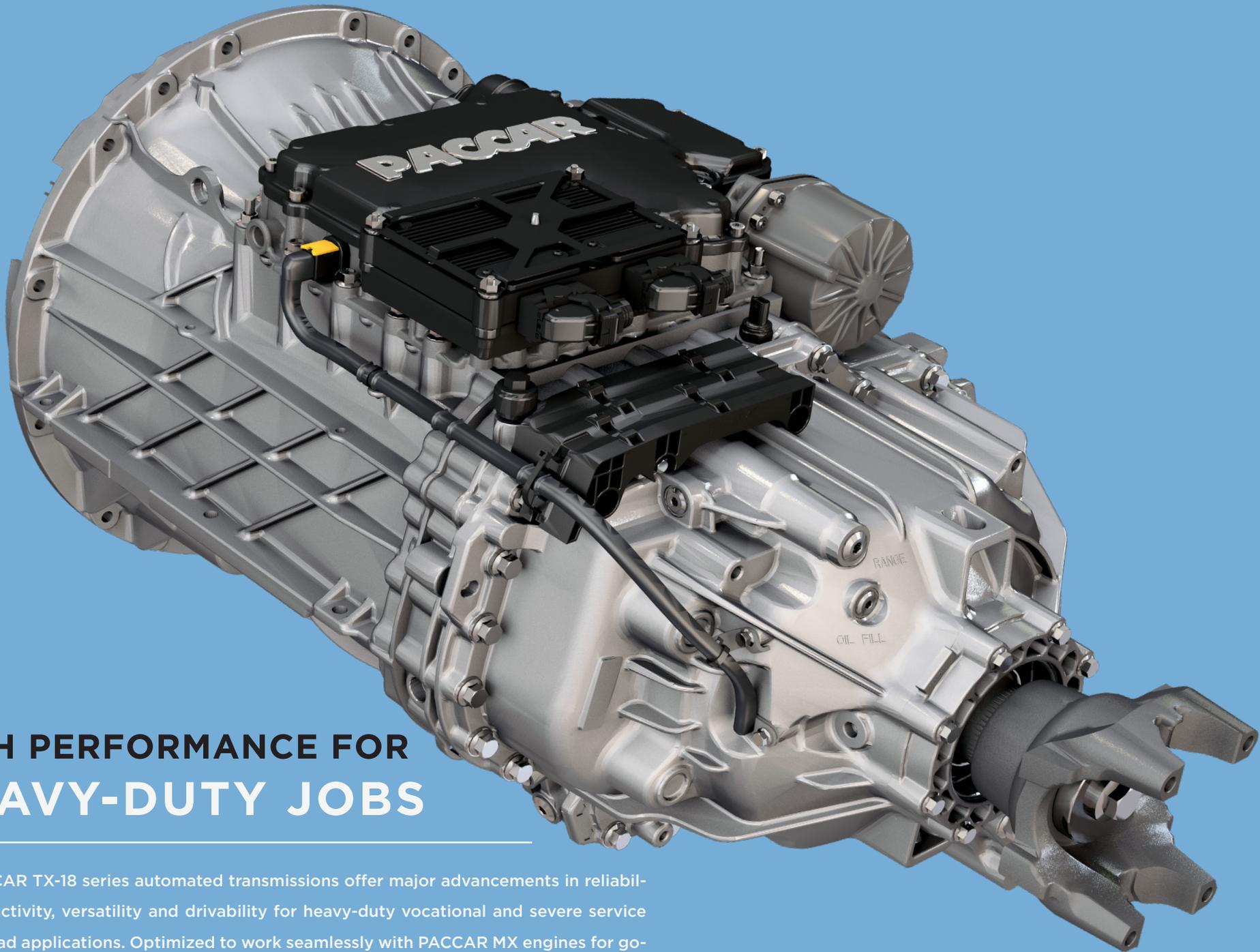


**PACCAR** TRANSMISSIONS

**PACCAR** TX-18  
AUTOMATED  
TRANSMISSION

**POWERED BY QUALITY**





## HIGH PERFORMANCE FOR HEAVY-DUTY JOBS

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The PACCAR TX-18 series automated transmissions offer major advancements in reliability, productivity, versatility and drivability for heavy-duty vocational and severe service on/off-road applications. Optimized to work seamlessly with PACCAR MX engines for go-to capability that pays off, every day.

# SMARTER BY DESIGN

Purpose-built, the TX-18 Series automated transmissions are designed to handle the most rigorous applications including heavy on- and off-highway hauling, construction, backwoods logging, oilfield jobs and a myriad of specialty vocations. Spec'd to your unique requirements, the TX-18 or TX-18 Pro offer an optimum solution – with superior ratio coverage, higher torque capability, better PTO functionality and unsurpassed maneuverability features. The extended gear range includes additional low-end ratios plus multiple reverse gears enabling the driver to slow down for extra precision or speed it up when conditions allow. All, while maximizing fuel efficiency and payload.

## KEY SPECIFICATIONS & CAPACITIES

<b>GEARS</b>	18 Forward/3 (TX-18) or 6 (PRO) Reverse
<b>TORQUE CAPACITY</b>	1,850 LB.-FT.
<b>MAX. HORSEPOWER</b>	510 HP
<b>OIL CAPACITY</b>	25.4 PTS.
<b>SYSTEM WEIGHT</b>	808 LBS. (TX-18) 813 LBS. (TX-18 PRO)
<b>MAXIMUM OPERATING WEIGHT</b>	140,000 LBS.
<b>PTO MAXIMUM CAPACITY</b>	160 HP
	Standard Dual PTO 8-Bolt Bottom Mount, 4-Bolt Rear Mount

<sup>1</sup> FOR COOLERLESS, NON-PTO CONFIGURATION

## WARRANTY COVERAGE

<b>LINE HAUL</b>	5 YRS./750K MI.
<b>STANDARD</b> (CONSTRUCTION, PICKUP & DELIVERY)	3 YRS./300K MI.
<b>SEVERE DUTY</b> (LOGGING, MINING, OILFIELD)	2YRS./UNLIMITED MILES

## MAINTENANCE INTERVALS

<b>ON-HIGHWAY</b>	500,000 MI or 5 YRS
<b>VOCATIONAL</b>	250,000 MI or 3 YRS
<b>CLUTCH</b>	Maintenance Free

## RATIOS

<b>1ST</b>	14.32	<b>R1</b>	15.25
<b>2ND</b>	11.96	<b>R2</b>	12.73
<b>3RD</b>	10.02	<b>R3</b>	10.67
<b>4TH</b>	8.43	<b>R4<sup>2</sup></b>	3.08
<b>5TH</b>	7.04	<b>R5<sup>2</sup></b>	2.57
<b>6TH</b>	5.9	<b>R6<sup>2</sup></b>	2.15
<b>7TH</b>	4.95	<b>OVERALL</b>	20.46
<b>8TH</b>	4.13		<sup>2</sup> TX-18 PRO
<b>9TH</b>	3.46		
<b>10TH</b>	2.89		
<b>11TH</b>	2.41		
<b>12TH</b>	2.02		
<b>13TH</b>	1.7		
<b>14TH</b>	1.42		
<b>15TH</b>	1.19		
<b>16TH</b>	1		
<b>17TH</b>	0.83		
<b>18TH</b>	0.7		

# ADVANCED ENGINEERING

## Purpose-Built Automated Transmission

LINEAR CLUTCH ACTUATOR

MECHATRONIC MODULE

OFF-HIGHWAY CALIBRATION

TRANSMISSION FLUID  
PRESSURE SENSOR

INTERNAL WIRING AND SENSORS

EXTREME DUTY CLUTCH

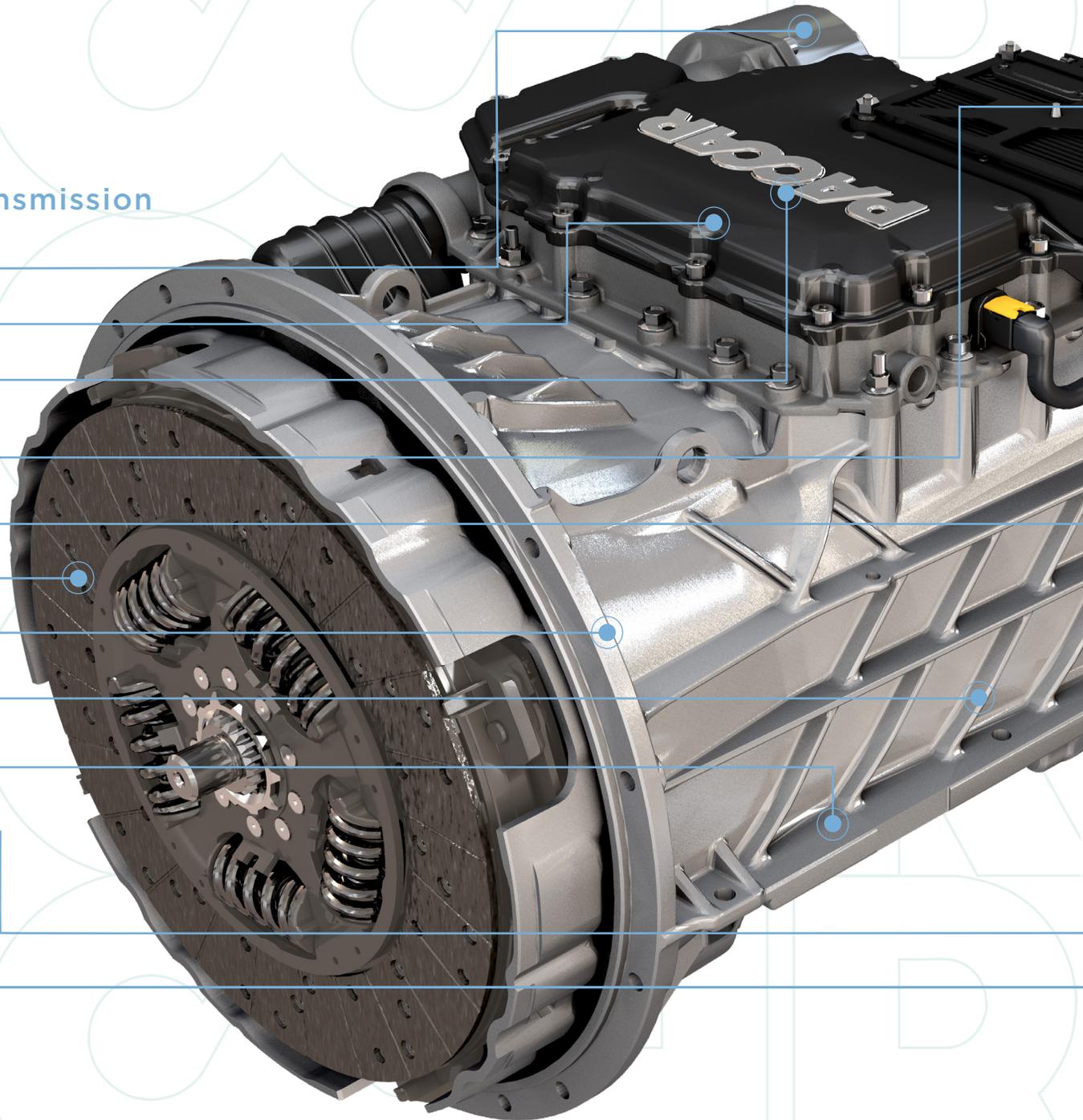
INTEGRATED CLUTCH HOUSING

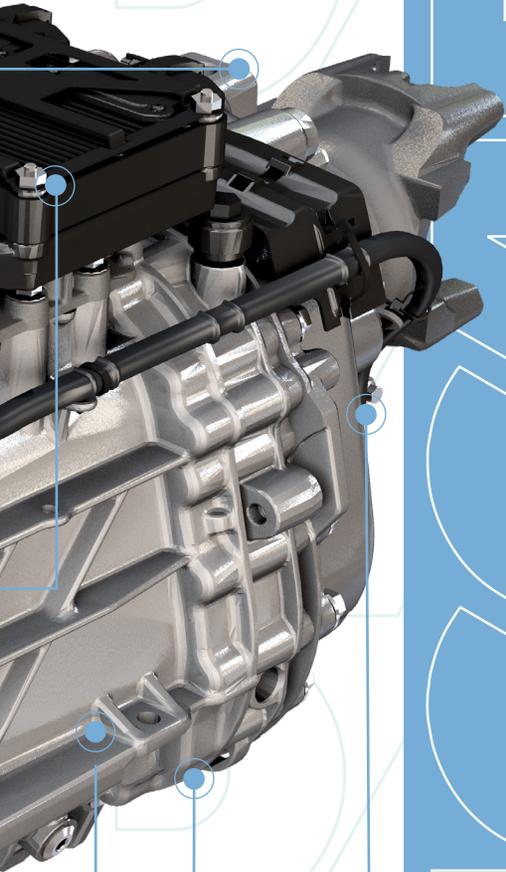
NEXT GENERATION 18 SPEED  
TWIN COUNTER SHAFT DESIGN

INPUT SHAFT DRIVEN PTO SYSTEM

HIGH SPEED REVERSE - UP TO 6  
CONFIGURABLE SPEEDS

HIGH-CAPACITY 4-BOLT REAR PTO  
OPENING & 8-BOLT PTO OPENING





# INTELLIGENT TECHNOLOGY

PACCAR's TX-18 transmission series comes with a suite of impressive technology features designed to make it easier to deliver loads as cost-effectively as possible.

FEATURE	DEFINITION
<b>HILL START AID</b>	Prevents unintended roll back or roll forward. When the grade exceeds the programmed threshold, foundation brakes automatically hold the truck for a controlled launch. It works when pointing uphill in drive or facing downhill in reverse.
<b>AUTO NEUTRAL</b>	Automatically shifts the transmission into neutral once the parking brake is engaged to prevent unintended movement.
<b>ENGINE OVERSPEED PROTECTION</b>	The transmission system upshifts if necessary to prevent engine over-speed in Drive, Manual and Low modes.
<b>ENHANCED ENGINE BRAKING</b>	Downshifts the transmission to help slow the truck on long, steep descents and increases brake pad life.
<b>LOAD BASED SHIFTING</b>	Selects appropriate starting gear and makes shift decisions based on grade, vehicle weight, engine torque and throttle position.
<b>URGE TO MOVE</b>	Drivers simply release the brake pedal to automatically inch forward, similar to the feel of a passenger car.
<b>PREDICTIVE SHIFTING</b>	Uses look-ahead technology to execute shift decisions that improve fuel economy and driver comfort.
<b>CREEP MODE</b>	Enables the driver to "creep" at low speeds and offering ultimate control.
<b>NEUTRAL COAST</b>	Fuel-saving feature that disengages the driveline on slight downhill grades
<b>OPTIMIZED GEAR SELECTION</b>	The appropriate starting gear is selected and makes shift decisions based on grade, vehicle weight, engine torque and throttle position—skip shifting when appropriate, making the most efficient shift changes based on those conditions.

# MORE.....

## PRODUCTIVE

The TX-18 Series is designed and built to perform at the highest level under the most demanding conditions.

A twin-countershaft design with helical gears and large bearings has been engineered for higher engine torque and weights (140,000 max operating weight and 1850 lb.-ft. max torque). An extreme duty clutch enables precise low speed maneuvering at maximum capacity (TX-18 Pro). The new 18-speed ratio set offers small, even steps for smooth shifts and excellent performance in all situations. Both models come with configurable reverse speeds for long reversing distances and higher productivity on even the toughest jobsite.

If your job calls for a power take-off, PACCAR's new TX-18 series is a great fit - offering dual output and the ability to operate independently of the transmission gear. Total combined PTO capacity is 160 horsepower and operates at 111% of engine speed.

## VERSATILE

When you're running heavy, you want a truck that's easy to drive and versatile so you can concentrate on the job and nothing else. The TX-18 has something for everyone, offering seasoned professionals the tailored configurations they prefer and the newest driver in the fleet get-in-and-go productivity.

Impressive low speed maneuverability and optimized software gives every driver the confidence to tackle even the most difficult conditions. Multiple shift calibrations are available to meet your exact application requirements. Plus, a comprehensive suite of intelligent features improves the efficiency and performance of every operation.

## RELIABLE

With the TX-18 Series, count on maximum uptime. A clean, contained design with internal wiring and sensors minimizes exposure and corrosion to wires and connectors. The cooler-less design (up to 110k lbs. GCW) requires less fluid and eliminates the risk of cooler leaks. Plus, smart features like a transmission fluid pressure sensor and oil temperature sensor protect critical components.

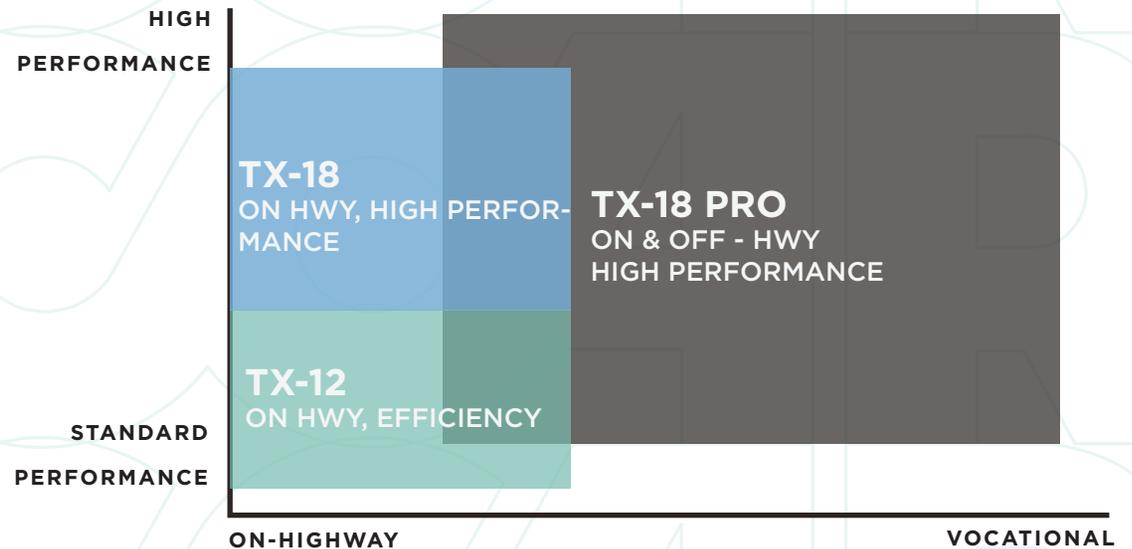
When it comes to maintenance, the theme is few and far between. In fact, the TX-18 requires less service than most automated transmissions in the industry (including one of the longest lube change intervals - up to 500k miles depending on the application). And the clutch is maintenance-free.

To ensure minimum downtime, a telematics-capable system provides near real-time monitoring of vehicle fault codes, prioritizes critical events, and provides an accurate and comprehensive action plan for PACCAR transmission experts. A great solution that speeds repair and puts you back in business fast.

# WHICH TRANSMISSION IS RIGHT FOR YOU AND YOUR JOB?

The TX-18 offers significant advantages over standard automated transmissions for on-highway customers hauling heavy loads. And the TX-18 Pro adds even more capability and unique features for extreme duty and vocational applications.

	<u>TX-18</u>	<u>TX-18 PRO</u>
UP TO 140K LBS. GCWR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1850 LB-FT TORQUE RATING	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6 REVERSE GEARS		<input checked="" type="checkbox"/>
EXTREME DUTY CLUTCH		<input checked="" type="checkbox"/>
OFF-HIGHWAY PERFORMANCE		<input checked="" type="checkbox"/>
ROCK FREE MODE		<input checked="" type="checkbox"/>

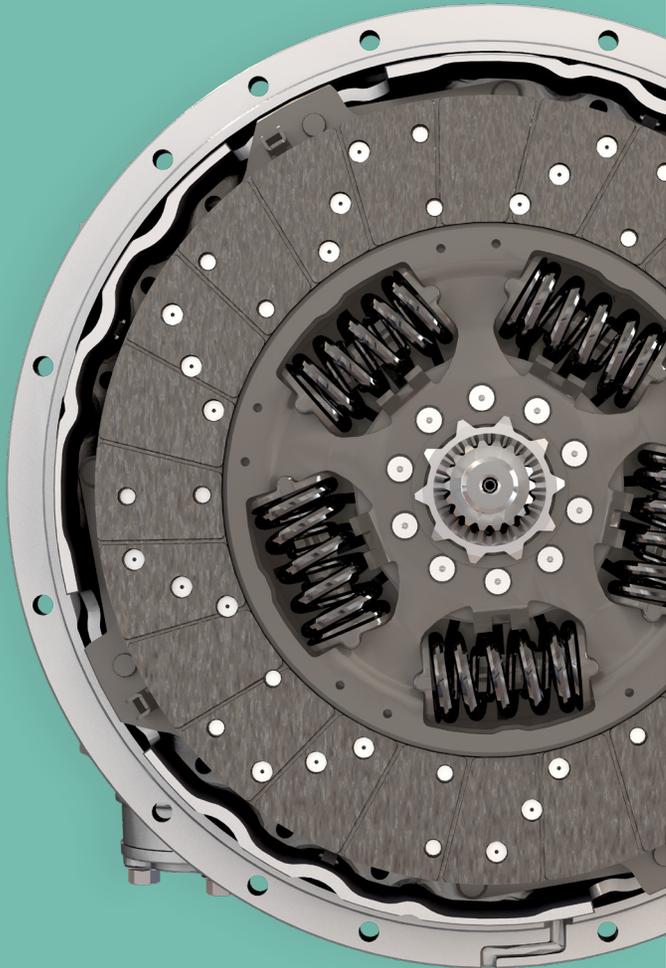


## EXTREME-DUTY CLUTCH

This is one tough clutch -- designed for maximum uptime. Its high thermal capacity allows for low-speed maneuvering at maximum capacity with reduced noise and vibration. Built-in transmission software further controls and protects the clutch.

## PERFORMANCE CALIBRATIONS

*The TX-18 series includes new calibrations specific to the demands of the job and transmission performance.*



CALIBRATION	DESCRIPTION/MISSION	WHO NEEDS IT?	TX-18	TX-18 PRO
<b>STANDARD</b>	Basic on-highway shift points for regular driving and blend of performance and fuel economy.	For customers looking for one-size-fits-all balanced operation to be used on every truck and application.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>PERFORMANCE</b>	On highway shift points tuned to get the most performance from the engine rating, at all vehicle weights.	For the performance seeking target customer, it is suitable for all truck types, weights and applications. A must-have for heavy haul and on-highway grades.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>TANKER</b>	Fast shifts for unbaffled tankers to minimize disruptions to the load.	Primarily designed for unbaffled tank haulers but might be an improvement for baffled tankers also.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>OFF-HIGHWAY</b>	Launch and shift points tuned for highly dynamic off-highway conditions.	Any vocational truck that spends time operating off-highway on unmaintained roads or soft-soil conditions.		<input checked="" type="checkbox"/>

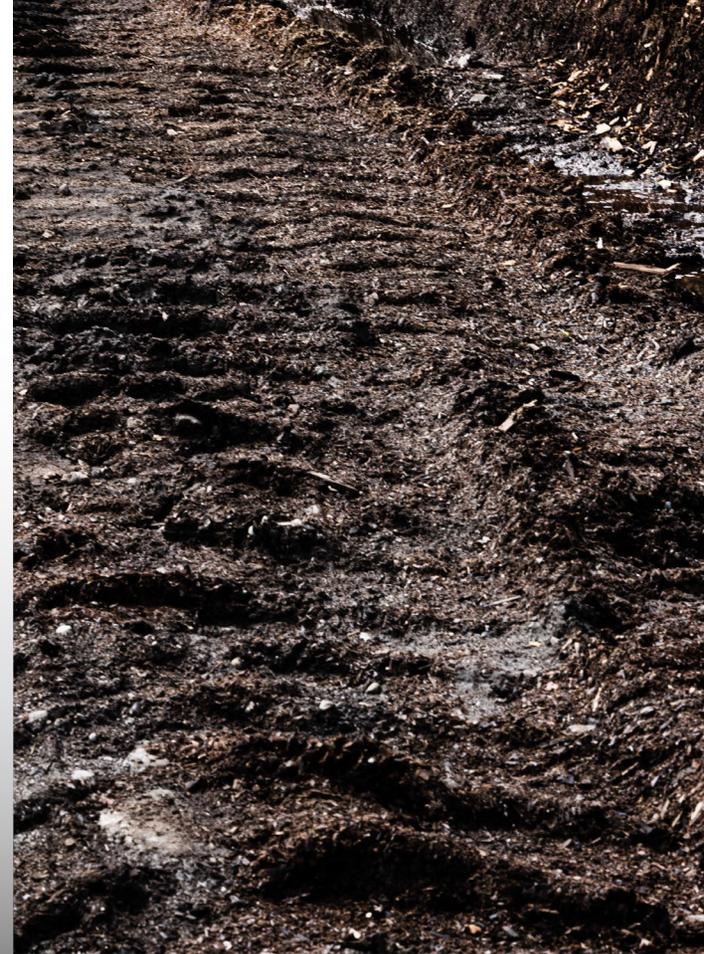
# ROCK SOLID SUPPORT

The PACCAR TX-18 is quality-manufactured for a long service life and comes backed by industry-leading warranties. When it's time for maintenance, you can count on expert, factory-trained technicians available at hundreds of dealer locations throughout North America. In addition, PACCAR offers 24/7 emergency roadside assistance through its Vehicle Support Center for as long as you own your truck.



## A PACCAR EXCLUSIVE

The PACCAR TX-18 Series comes standard with an ergonomic, automotive-style column shifter that is simple and intuitive to operate. Transmission controls include Drive, Neutral, Reverse, and Manual modes as well as a selector for the engine brake.



## ROCK-FREE

Bogging down in troublesome terrain can trim productivity, not to mention potential maintenance issues. The TX-18 Pro comes with a smart option that gives the driver the control to rock the vehicle free when stuck in sand, mud, snow or ice – without having to pump the clutch as you would with a manual transmission.

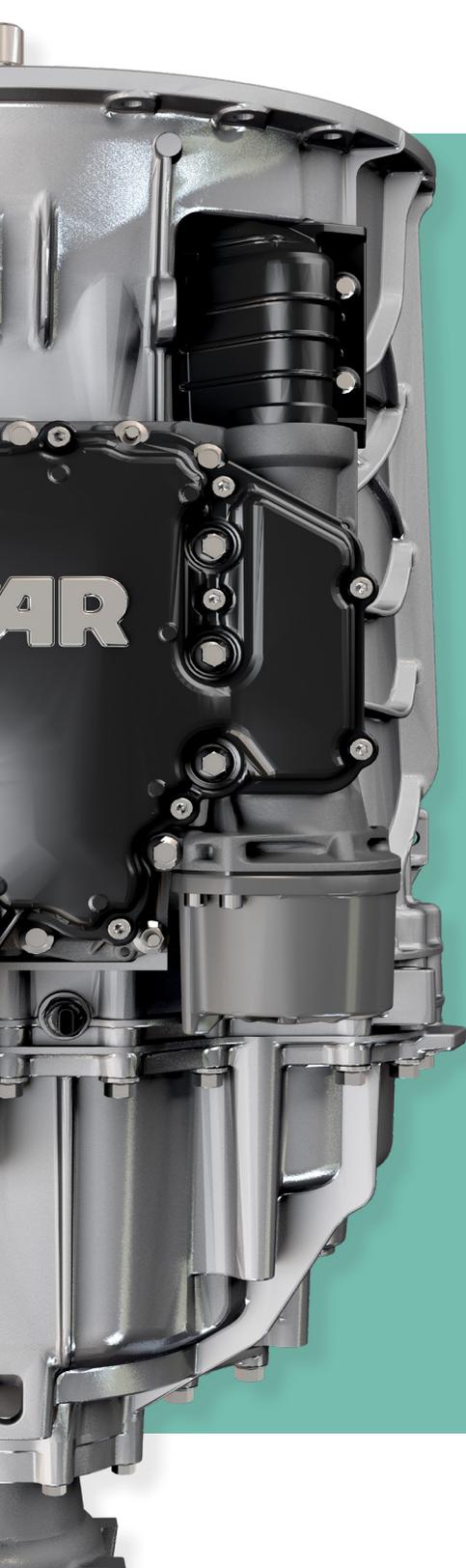
# Driving Smarter Has Never Been Easier

Of all the variables that contribute to an efficient operation, how well a truck can be driven is still the one factor that matters most. Especially true for heavy-hauling applications.

## **IMPROVED DRIVER PERFORMANCE:**

PACCAR's new automated transmission offers unprecedented drivability in all conditions, making your vehicle easier, more productive – and safer – to operate on even the toughest jobsites. Shifting is effortless, quick, and quiet as the transmission selects the best gear for every driving condition. Intelligent features enable drivers to keep both hands on the wheel, focus on the job and drive with confidence.





## **BETTER FUEL ECONOMY, FLEET-WIDE:**

Expect best-in-class fuel efficiency with the PACCAR TX-18 Series - up to 2 percent over similar transmissions. The system monitors changes in road grade, vehicle acceleration, torque demand, weight and engine load to keep the truck in the most fuel-efficient gear possible. Even the most experienced professional would find it difficult to deliver the same level of performance.

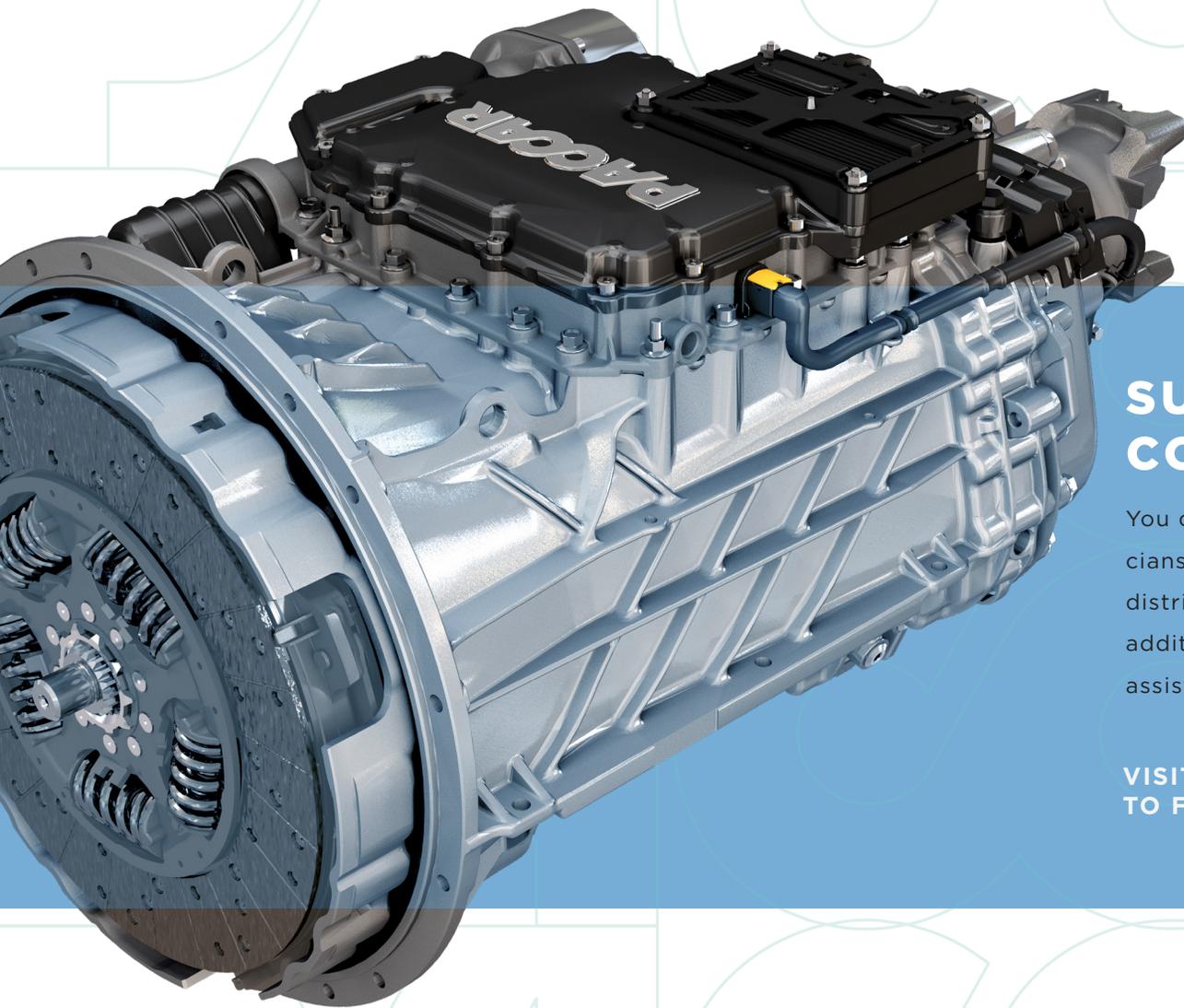
## **ENHANCED RECRUITMENT AND RETENTION:**

Running trucks that are easier to operate helps companies expand their pool of recruits. Training is less complicated and time consuming. New drivers reach optimal performance sooner. And drivers of all experience levels find the job less fatiguing and more satisfying -- a big reason fleets tend to retain their best people longer.

## **YOUR PAYOFF:**

Better, more consistent driving habits throughout your operation optimizing your total return on investment.

# PACCAR



## SUPPORT YOU CAN COUNT ON

You can count on expert, factory-trained technicians available at hundreds of PACCAR Powertrain distributor locations throughout North America. In addition, PACCAR offers 24/7 emergency roadside assistance through its Vehicle Support Center.

VISIT [WWW.PACCARPOWERTRAIN.COM](http://WWW.PACCARPOWERTRAIN.COM)  
TO FIND YOUR LOCAL DEALER

**PACCAR POWERTRAIN**

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Bellevue, WA 98009

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PACCAR TX-18 Brochure 22

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