

## Drive a Tireless Workhorse

With decades of proven performance and durability in their DNA, UltraShift *PLUS*® automated transmissions can be spec'd for your fleet's unique requirements — from torque and GCW limits to PTO functionality and maneuverability features. Plus, our products are backed by the solutions, support and expertise of the Roadranger® network. That's something you won't find with any other transmission.



UltraShift *PLUS* transmissions use Eaton IntelliConnect™, a telematics-capable system that provides near real-time monitoring of vehicle fault codes, prioritizes the critical events, and provides accurate and comprehensive action plans by our technical experts. Unplanned downtime is reduced and quicker repair diagnosis gets you back on the road faster.



Read on to learn more and visit [eatoncummins.com](http://eatoncummins.com) for a closer look at specifications, videos and more.

## Key Specifications and Capacities

FEATURE	UltraShift® <i>PLUS</i> VCS	UltraShift® <i>PLUS</i> VMS	UltraShift® <i>PLUS</i> MHP	UltraShift® <i>PLUS</i> MXP/VXP
Forward Gears	10	11	13	18
Reverse Gears	3	3	3	4
1 <sup>st</sup> Gear Ratio	14.56	26.08	12.29	14.4
Overall Ratio	19.68	35.73	16.84	16.70 (A-Ratio) 19.73 (B-Ratio)
Max. Engine Torque (lbs.-ft.)	1750	1750	2250	2250
Oil Capacity (pints)	28	28	28	28
PTO Provisions	6 bolt/8 bolt/ Thru Shaft	6 bolt/8 bolt/ Thru Shaft	6 bolt/8 bolt/ Thru Shaft	6 bolt/8 bolt/ Thru Shaft
Max. GCW/GCVW	Up to 110,000 lbs.	Up to 110,000 lbs.	Up to 140,000 lbs.	Unlimited
Typical Markets and Vehicle Types	Dump Roll-Off Asphalt Truck Municipality Utility	Mixer Pumper Crane Dump	General Freight Bulk Hauler Doubles/Triples Steel Hauler Tanker Livestock Hauler	Equipment Hauler Lowboy Logging Mining Construction Agriculture Military

## Peace of Mind

Like all Eaton Cummins automated transmissions, UltraShift *PLUS* is backed by the support, solutions and expertise of the Roadranger® network.

BACKED BY  
**Roadranger**  
SUPPORT

Roadranger: Eaton, Eaton Cummins Automated Transmission Technologies and trusted partners providing the best products and services in the industry, ensuring more time on the road. UltraShift *PLUS* is a registered trademark of Eaton Cummins Automated Transmission Technologies.

Standard warranty*	
Transmission	Vary from 2 years, unlimited mileage to 7 years, 750,000 miles
Clutch	Vary from 2 years, unlimited mileage to 3 years, 350,000 miles
Extended protection plans	
Transmission	1 year, 2 years, and 3 years unlimited mileage
Clutch	1 year, 2 years, and 3 years unlimited mileage

\*Warranties vary depending on transmission model and vocation. Please visit [roadranger.com](http://roadranger.com) to learn more.

Eaton Cummins Automated Transmission Technologies  
P.O. Box 4013, Kalamazoo, MI 49003 USA  
800-826-HELP (4357)  
[eatoncummins.com](http://eatoncummins.com)

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**Roadranger**  
SUPPORT



# UP TO THE CHALLENGE

There are two things we know: the job site is tough and no two are alike. Severe service and performance-minded fleets demand a lot from their trucks — capability, reliability, low cost of ownership and vehicle control.

Our UltraShift® *PLUS* automated manual transmissions are built to handle a broad variety of jobs — from construction fleets taking on tough terrain, to loggers with the heaviest of loads. So, if you're looking for superior ratio coverage, higher torque capability, while balancing fuel efficiency and driveability, look no further.

### Self-Adjusting Ceramic Clutch

Dual-plate ceramic clutch for improved durability in high GVW applications.

### Engine Overspeed Protection

The transmission system upshifts, if necessary, to prevent engine overspeed in Drive, Manual and Low modes.

### Electronic Clutch Actuator

Enhances maneuverability at lower and reverse speeds, and makes backing up even easier.

### Smart Gear Selection

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.

### Skip Shifting

Automatically skips unnecessary gears to increase shifting efficiency. Helps increase acceleration to achieve cruising speed quickly and smoothly period - spn global.

### Creep Mode

Enables the driver to “creep” at low speeds, and offers ultimate control for curbing, spreading and paving.

### Hill Start Aid

Prevents unintended roll back or roll forward. When the grade exceeds one percent, foundation brakes hold the truck for a controlled launch. It works when pointing uphill in drive or facing downhill in reverse.

### Blended Pedal

Drivers can use the throttle to feather the clutch for seamless low-speed control.

### Urge to Move

Drivers simply release the brake pedal to automatically inch forward, similar to the feel of a passenger car.



### Automatic Grade Braking

Downshifts the transmission to help slow the truck on long, steep descents and increases brake pad life.

### Oil-Level Sight Glass

Easy way to check fluid level for quicker preventative maintenance.

### Multiple Operating Modes

Automatic, Manual and Low modes offer the driver full control. In Manual mode, the driver can override computerized shifts on demand. Using Low mode can help maximize engine braking and reduce wear on brakes.

### Enhanced Engine Braking

Provides maximum engine braking to 600 horsepower or more.

## Get to Know UltraShift® *PLUS*

Fleet managers and drivers alike will appreciate the improved safety and greater fleet-wide fuel efficiency these automated transmissions deliver compared to their manual counterparts and torque converter automatics.



### A Transmission for Every Job

With models ranging from 10 to 18 speeds, world-class startability and ratio coverage, UltraShift *PLUS* transmissions are capable of handling high torque and high GVWs, making them popular in some of the most rigorous vocations you'll find — logging, oil field and other heavy-haul applications. In fact, the 18-speed UltraShift *PLUS* MXP and VXP have no gross vehicle weight limitations. For fleets needing additional capability, these transmissions can be paired with 2-speed, axles for even more gear reduction.



### Performance You Can Count On

Vehicle control is vital on job sites. That's why we engineer advanced features such as GearLogic™ technology, which improves low-speed performance, into our products. When it comes to grades, UltraShift *PLUS* transmissions offer superior performance compared to torque converter automatics. The Aggressive Performance calibration also improves acceleration through enhanced shift strategies. Enhanced split-shaft power take-off (PTO) capabilities allow the operator to control the throttle and transmission gear selection outside the vehicle's cab for improved efficiency and safety.



### Designed for Your Bottom Line

UltraShift *PLUS* transmissions are designed for optimal fuel efficiency, and less wear and tear on drivetrain components for reduced maintenance costs. Compared to a torque converter automatic, an UltraShift *PLUS* will cost you about 50% less. It will also double the length of lubricant change intervals and use 50% less fluid. Service can be performed at your local dealer to get your vehicle back on the job faster maximizing your uptime -- no need for a two-step repair process.

