

UltraShift® PLUS Transmissions Provide Smoother Shifting for State DOT

Location Details:

Wyoming

Segment Details:

Department of Transportation

Problem:

Needed a transmission that was easy to operate and still provided high performance in a variety of applications.

Solution:

Eaton's UltraShift *PLUS* automated transmissions.

Results:

Smoother shifting, driver satisfaction and minimal downtine.

Contact Information:

Eaton Corporation Truck Group P.O. Box 4013 Kalamazoo, MI 49003 1-800-826-HELP (4357) www.roadranger.com "Since making the move to automated transmissions we have had minimal downtime with those units — practically none really — and that's pretty remarkable considering the duty cycles we put these trucks through year after year."

Bernie Kushnir, fleet manager

Background

The Wyoming Department of Transportation (WYDOT) is Wyoming's largest state agency, with wide-ranging functions and responsibilities - all concerned with providing a safe, high-quality and efficient transportation system. Working closely with private sector partners, WYDOT employees plan, design, construct and maintain roads and bridges, while promoting safety and protecting the environment. Other WYDOT responsibilities include law enforcement, driver licensing, motor vehicle regulation, airport improvement assistance and coordination with local jurisdictions on planning, project supervision and public transit.

As fleet manager for WYDOT, Bernie Kushnir is responsible for maintaining more than 3,600 pieces of equipment that operate over roughly 16,000 lane miles of road surface in the nation's 10th largest state — a state that might see as much as 200 inches of snow annually.

In the fall of 2009, WYDOT put out a bid for roughly 33 new trucks. The department typically replaces its trucks after 350,000 miles or 15,000 hours of road service. Bids are required by state law to go out to all of the major North American truck makers.

International® Truck & Engine Company eventually won the order. The company was preparing to build the new trucks for WYDOT with its MaxxForce® diesel engine. About the same time, International was approving Eaton's newest automated product – the UltraShift *PLUS* series transmissions – as an option for the International engine.



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Challenges

Representatives of Eaton Corporation very much wanted Kushnir to specify UltraShift PLUS transmissions with the International order, believing this latest generation of automation would be ideal for WYDOT's demanding vehicle operations, even better than what Eaton was already supplying.

Eaton, in fact, had introduced Kushnir to automated transmissions about six years earlier with its first automated offering, known as Eaton's AutoShift® transmissions. These early models required the use of a clutch pedal only during starting and stopping. In the interim the electronics took over and all shifts were made automatically.

Kushnir has since embraced the concept, claiming the automated transmissions have improved reliability and efficiency.

"Since making the move to automated transmissions we have had minimal downtime with those units – practically none really – and that's pretty remarkable considering the duty cycles we put these trucks through year after year," says Kushnir. "It's the perfect solution for putting a new driver with minimal experience behind the wheel. Eaton, however, came to us and said they had something even better."

Solution

Introduced in September 2009, Eaton's new lineup of UltraShift *PLUS* automated transmissions feature new intelligent shift selection software that employs grade sensing, weight computation and driver throttle commands to make intelligent shift decisions for efficient and safe vehicle performance.

Unlike Eaton's AutoShift transmissions, the new UltraShift *PLUS* units do not require the use of a clutch pedal at any time during vehicle operation.

"Eaton approached us and recommended that we specify the UltraShift *PLUS* transmissions with our new truck order," related Kushnir. "We agreed in part due to our satisfaction and success with the original automated products."

Results

Kushnir is still evaluating the transmissions, but his early reviews have been positive.

"It shifts more smoothly, which we were told is due to the electronic programming," says Kushnir. "It definitely has a more refined shift. It looks like Eaton might have hit a homerun with this one."



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Bernie Kushnir, Fleet Manager, Wyoming Department of Transportation

To help grant his wish, Kushnir says Eaton has followed up the order with excellent field support by providing classes, including question-and-answer sessions and general training sessions for everyone in his department.

"You are only as good as the people with whom you are surrounded," concludes Kushnir. "That includes surrounding yourself with good vendors and one of them, Eaton, has been very good over the years."

Eaton Corporation

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