



An *ArcBest* Company

Automated Manual Transmissions



ABF Freight fleet shifting to driver-friendly, fuel efficient Automated Manual Transmissions.

Our new AMT-equipped tractors offer increased efficiency, productivity and safety that will set the bar for the LTL industry. The AMT continuously monitors multiple driving variables to maximize driver productivity, performance and fuel efficiency.

These automated manual transmissions maximize driver productivity, performance and fuel economy. They make pulling a big load easier, safer and smarter.

No clutching. No shifting.

The transmission integrates seamlessly with the engine. There's no clutch pedal or gear shift. The gear selection is operated by an intelligent shift pad module and managed by sophisticated electronics.

The AMT delivers smooth shifts every time and can be operated by more drivers than a traditional manual transmission.

THE
SKILL & THE WILL



Freightliner trucks will be equipped with Eaton AMTs

Intelligent Drive.

Featuring advanced technology, AMT-equipped tractors continuously monitor changes in grade (both up and down), vehicle speed, throttle position, acceleration, torque demand and combined vehicle weight.

With the engine and transmission in constant communication, there is no compromising. The AMT automatically selects the best gear for optimized fuel economy at the desired road speed.

This puts less stress on the driveline for longer life and less wear.

The transmission features two-speed reverse to better control speed and engine RPM.

Reduced Maintenance. Reduced Stress.

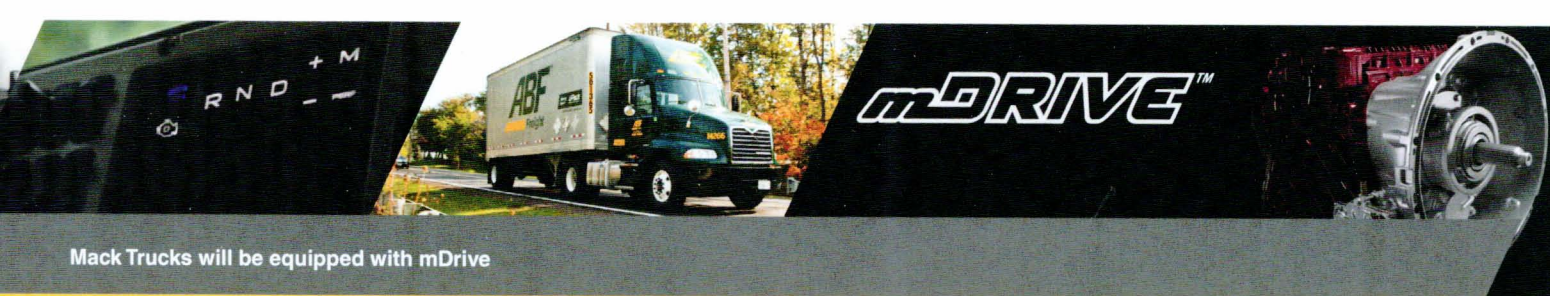
The AMT is based on proven technology, requiring minimal service and significantly reducing maintenance downtime.

AMTs enable drivers to work more efficiently by eliminating traditional shifting. By removing that task, AMTs enable drivers to focus on the job at hand: delivering their cargo safely and on time. With its simplified shifting, AMTs also can help attract and retain drivers.

Sophisticated programming and precise engineering and manufacturing deliver smooth shifts and automatically select the best gear for conditions.

Key Benefits

- ▶ Low vehicle speed modulation makes low-speed maneuvers, trailer hook-ups and docking go smooth and easy.
- ▶ Under most driving conditions, the transmission operates as fully automatic, requiring no input from the driver.
- ▶ The transmission and engine are connected via computer and detect whether a trailer is attached and whether it's carrying a load, adapting the shift points to optimum RPMs.
- ▶ The system detects whether the vehicle is ascending or descending and adjusts the shift strategy to optimize fuel economy.
- ▶ "Hill holding" feature maintains the foot brake for three seconds to allow the driver time to move his foot from the brake to the throttle while on a grade.



Mack Trucks will be equipped with mDrive

Dash Mounted Control & Display.

The Mack mDrive AMT is controlled through a dash-mounted shift pad with an integrated display to indicate the current gear.

The Freightliner Cascadia with Eaton AMTs are controlled through a steering column mounted paddle with a dash mounted display to indicate current gear.

The driver display, located in the center of the instrument panel, displays the AMT's status, the current gear and the current operating mode.

“AMTs enable drivers to work more efficiently by eliminating traditional shifting.”

Better. Safer. Easier.

Automated transmissions drastically cut training time for novice drivers because there's no double-clutching or multi-speed gear selection to learn.

AMTs lead to longer life for U-joints and drive shafts, which suffer when rough shifting of manual transmissions sends shocks through the driveline.

Safety is another reason for moving away from manuals, since drivers can concentrate on traffic and where their rigs are instead of what gear to be in.

Whereas even the best drivers grow tired and sometimes get a little less efficient in shifting, a modern AMT will shift correctly all the time. That means AMTs can also deliver fuel economy.

Veteran drivers, who at first might not like AMTs, soon change their minds when they see how much work they save.

ABFSM
Freight

An **ArcBest** Company



FAQs

Q: Don't AMTs leave the driver with less control?

A: Actually, the AMTs give drivers more control. Since the drive train is computerized, drivers can keep both hands on the wheel and concentrate on driving.

Q: How do we know this is not just a passing fad?

A: The U.S. military has been using automated transmissions since the late 1970s. Today all the military's tactical vehicles operate with automated or automatic transmissions. In other words, these automated transmissions are literally battle tested.

Q: Have any ABF Freight drivers tested the AMTs?

A: Yes. ABF Freight drivers in the west coast RPM operation have been driving AMT-equipped tractors since 2012. The drivers, while skeptical at first, love driving them. The lack of clutching and shifting leaves the drivers less fatigued at the end of their dispatch. There are some pretty steep grades in the mountains out west, and the AMTs handle them spectacularly.

Q: What makes of tractors will have AMTs?

A: ABF Freight has ordered 238 AMT-equipped tractors from Mack and 237 from Freightliner. These will be placed into linehaul service.