Allison Can Improve Fuel Economy Up To 7% With xFE Technology

xfe...The Route To Extra Fuel Economy
Fleets Around The World Realize Improved Fuel Economy With xFE

From St. Louis, USA, to Seoul, South Korea, real-world tests with customer fleets demonstrate xFE’s ability to improve fuel economy up to 7% over comparatively equipped models.

Assuming you drive 35,000 miles and achieve 4.3 MPG, you pay $3.00 per gallon. You spend $24,419 on fuel and emit 80 metric tons of greenhouse gas per year.

If you improve fuel economy by 7%, you reduce greenhouse gas emissions by 5 metric tons. You save 529 gallons and $1,587 on fuel per year per vehicle.

Results depend on duty cycle. Contact your Allison representative to ensure xFE is the best choice for your specific need.
Real Changes.

Real Fuel Savings.

xFE is another in a string of innovative, fuel saving ideas from Allison. xFE stands for Extra Fuel Economy. This fuel savings results from new gear ratios designed to squeeze more value from every tank of fuel.

Earlier Lock Up + Lower Engine Speeds = Extra Fuel Economy

xFE models have been designed to deliver significantly more torque converter lock up operation and spend more time in higher ranges at lower engine speeds producing exceptional fuel savings.
Faster Lock Up For Increased Efficiency

We’ve designed our transmission models with xFE to lock up at lower speeds, specifically for the constant shifting and lower average speeds of fleets. This means lock up happens significantly earlier and vehicles run longer where they are most efficient.

Upshifts – Lock Up In 2nd Range

![Graph showing upshifts and lockup in 2nd range](image)

**RPM**

**Time (seconds)**

1-2 shift

Lock Up

Engine Speed @ 2000 rpm

**xE Upshifts – Lock Up In 1st Range**

![Graph showing upshifts and lockup in 1st range](image)

**RPM**

**Time (seconds)**

1-2 shift

Lock Up

Engine Speed @ 1600 rpm

**Wide ratio excluded.**
xFE Builds On FuelSense® Max
To Save Even More²

To get the most out of every drop of fuel, Allison 5th Generation Electronic Controls offer an enhanced array of smart controls designed to increase fuel economy for the specific needs of any application.

Features

FuelSense® 2.0 presents new and upgraded FuelSense® features to provide even more precise balancing of fuel economy and performance:

DynActive™ Shifting — This new innovative shift scheduling uses an algorithm to choose the most efficient shift point, based on your specifications, vehicle and environmental parameters. Older shifting technologies use shift schedules with fixed shift points.

Neutral at Stop — This feature trims fuel consumption and emissions by reducing or eliminating the load on the engine when the vehicle is stopped. There are two versions of Neutral at Stop:

- Standard — Provides partial (first-level) Neutral at Stop.
- Premium — Provides full Neutral at Stop and a new, low-speed coasting capability.

Both versions lock the output while stopped to prevent rollback.

Acceleration Rate Management — A feature that mitigates aggressive driving by automatically controlling engine torque. Newly updated, in addition to five levels of control, it provides more precision by limiting vehicle acceleration to a customized calibrated rate.

²FuelSense Plus package also available with xFE transmission models.

Designed For Both Fleet And OEM Convenience

City and transit buses, distribution trucks and pupil buses are ideal applications for xFE technology. The start-stop dense routes and lower average speed duty cycles present special challenges for any transmission. Allison fully automatic transmissions with xFE meet these challenges without sacrificing drivability or performance and are compatible with alternative fuel engines. Best of all, installation of an xFE transmission is the same as a standard Allison model.
From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to approximately 1,400 Allison Authorized Distributors and Dealers around the globe, you are never far from the products, training, service and support you demand.

Our support starts from the moment an Allison transmission is specified. We work with you to ensure that the model and ratings fit your engine to create a tailored package of powerful performance and reliable efficiency. When you need parts or service, you can count on global access to factory-trained specialists and Allison Genuine Parts™.

A World Of Support