The Allison TC10™ Transmission puts improved fuel economy at your fingertips. You can get up to 5% better fuel economy with Allison's proprietary enhancements.

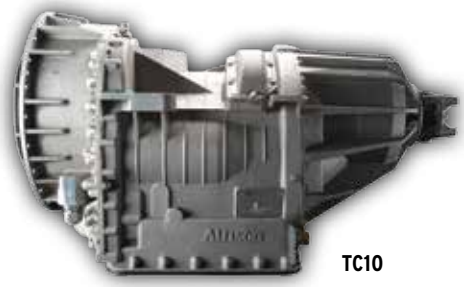
- **The TC10 has the ability to down speed the engine and still maintain performance.**
- **Lock up in first range maximizes fuel efficiency.**
- **Close ratio steps in the higher ranges allows for precision engine speed control, maximizing your time in the sweet spot.**
- **FuelSense features are customized specifically for tractor duty cycles.**

Now is the time to experience real savings and real performance. Now is the time for the TC10.

Allison TC10™ Delivers 5% Better Fuel Economy

Featuring FuelSense® – EcoCal, Dynamic Shift Sensing, Neutral at Stop and Acceleration Rate Management.

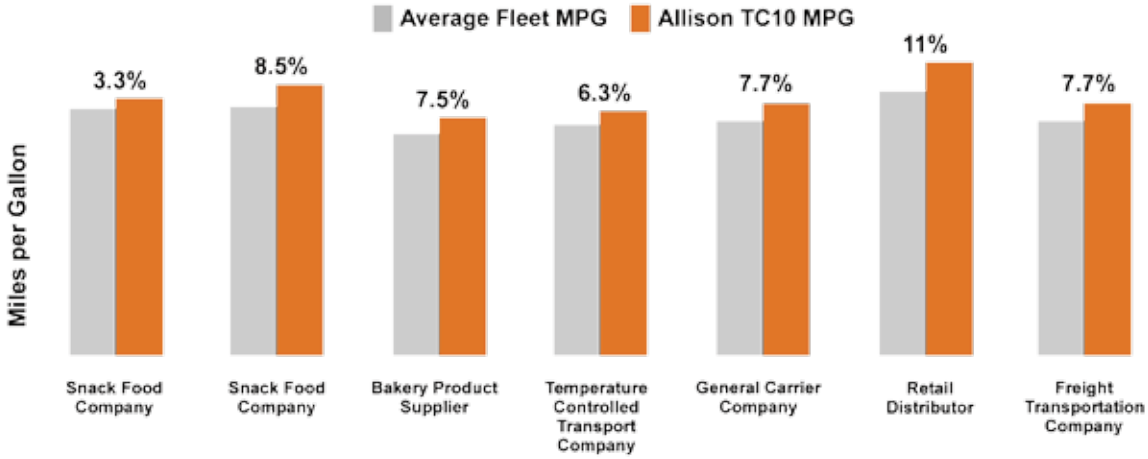
Real-world test fleet users have documented an average 5% fuel economy improvement with Allison TC10 equipped tractors over their current manual or automated manual equipped tractors. Thanks to FuelSense, the TC10 automatically achieves the best fuel economy, regardless of driver experience or expertise. It shifts at just the right points on the power curve – with virtually no loss of acceleration – right into cruise gear.



TC10

ENGINE hp (kW)	WEIGHT lbs (kg)
600 (447)	1074 (487)
INPUT TORQUE lb-ft (N•m)	**OUTPUT TORQUE lb-ft (N•m)**
1700 (2305)	13,000 (17,630)

Fuel Economy Results Provided by Initial Test Customers



Distribution | Short Haul | Regional Haul | Line Haul

Class 8 tractors have historically been forced to compromise overall vehicle drivability, along with transmission reliability, dependability and performance, in favor of fuel economy. Not any longer.

"WE HAVE HAD SEVERAL TESTS/DEMOS IN THE PAST, BUT WE HAVE NEVER HAD ONE SO WIDELY ACCEPTED BY THE DRIVERS AS THE TC10™."

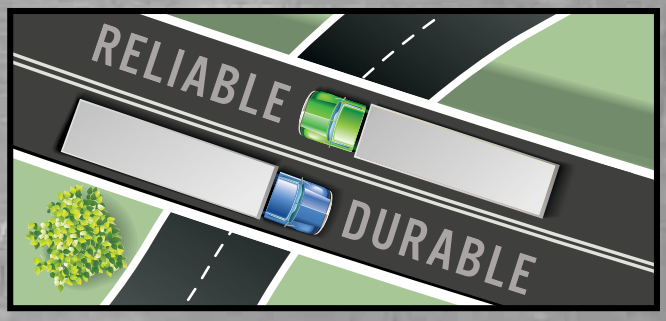
Neil Peterson, operation manager
Deseret Transportation | Salt Lake City, UT

An Idea Whose Time Has Come

The all-new Allison TC10 is engineered specifically for Class 8 tractor applications. The TC10 maximizes drivetrain efficiency while achieving and maintaining highway cruising speeds to save you time and money. And, in city and suburban driving, the fully automatic TC10 engages the torque converter only at launch, lowering cooling requirements and protecting the drivetrain, while providing fast and smooth startability for stop-and-go situations.

Shifting Efficiency

Allison's Continuous Power Technology™ yields uninterrupted power shifts, maintaining power flow to the drive wheels and eliminating the power loss associated with manual and automated manual transmissions. In addition, close ratio steps in the upper ranges and a wider range of axle choices, enable full use of modern, low-speed engine efficiencies.



Proven Reliable & Durable

Allison is the world's leading supplier of automatic transmissions for commercial vehicles with over 6 million produced. We have a rock solid reputation for engineering excellence, and we give you peace of mind with a 5-year/750,000 mile warranty on every Allison TC10.

The next generation of Allison electronic controls offers a variety of features to further improve fuel economy and maximize transmission protection with advanced prognostics.

Allison Transmission

5th Generation ELECTRONIC CONTROLS

Now featuring FuelSense® — *EcoCal, Dynamic Shift Sensing, Neutral at Stop and Acceleration Management*

Improved Fuel Economy

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 and fuel efficiency for the specific needs of any application.

EcoCal – Provides lower shift points to get into lock up as soon as possible, providing necessary performance without shift cycling.

Dynamic Shift Sensing – Automatically selects between lower/higher speed based on the vehicle's actual payload and the grade on which it is operating to optimize fuel economy while maintaining superior performance.

Neutral at Stop – Automatically eliminates the load on the engine when the vehicle is at a full stop to save fuel and reduce overall vehicle emissions.

Acceleration Rate Management – Mitigates aggressive driving by controlling engine torque based on the vehicle's grade and load.

Prognostics

Calibrated to the vehicle's particular operating requirements, Allison's advanced prognostics monitor various operating parameters to determine and alert when service is due. This eliminates unnecessary oil and filter changes and provides maximum transmission protection.

Oil Life Monitor

Based on the vehicle's duty cycle, this feature determines fluid life and alerts you when a fluid change is required. Not only does it help you get maximum oil life while providing the maximum protection for the transmission, the Oil Life Monitor also saves you money by preventing unnecessary fluid changes.

Filter Life Monitor

This provides an alert when the transmission's fluid filter(s) need to be replaced. It helps extend filter change intervals to reduce routine maintenance downtime and saves you money in the long run, all the while providing maximum protection for the transmission.

Additional electronic control packages are available. See your local Allison representative for the ones that fit your particular application.

Life Cycle Value

When you factor in all life cycle costs — vehicle purchase price, insurance, fuel, tires, preventive maintenance, component repair, driver wages, taxes, license, permits and retail resale value — along with the increased productivity, an Allison Automatic-equipped vehicle costs less per mile* to operate than a comparable competitively-equipped vehicle.

***Results may vary depending on your operating conditions. See your local Allison representative to find the potential productivity gains for your particular business.**

"I WAS VERY PLEASED WITH THE TC10™ TRANSMISSION. THIS PRODUCT IS BETTER THAN WHAT WE OPERATE TODAY."

Bennie Ellenberg, driver
US Xpress | Greenville, SC

Blended Architecture

The TC10 represents the best of both worlds by combining drivability, performance and durability benefits of Allison's fully automatic transmissions with the cruising fuel economy inherent in twin countershaft architecture.

Maintenance Made Easy

Routine oil and filter changes are the only regular preventive maintenance required with an Allison Automatic. Easily accessible oil filters reduce labor costs and valuable downtime. TranSynd® TES 295 transmission fluid greatly extends oil change intervals.

Plus, we give you peace of mind with an oil change at 5-years/500,000 miles.

TranSynd is a registered trademark of BP Lubricants Americas, inc., used under license.

Driver Friendly

No special driver training is required with the Allison TC10. It operates similar to an automatic transmission in a passenger car. That goes a long way in helping recruit and retain drivers.

Fleet Flexibility

The TC10 not only makes it possible to have more deliveries per day, it also allows you to get more out of each truck. A TC10-equipped truck can run an urban delivery route during the day, and then run a regional highway route at night.

"GREAT SHIFT QUALITY, SMOOTH SHIFTING, SHIFTS RAPIDLY WHEN ACCELERATING FROM A STOP, ALLOWING SMOOTHER ENTRY INTO TRAFFIC."

Amanda Fisher, driver
Central Refrigeration Services | Salt Lake City, UT

Startability

Startability is a vehicle's capability to launch and pull a load. Simply put, it's the "grunt" or "get-up-and-go" of a truck. Often only the 1st gear ratio is used to judge a vehicle's startability. The truth is, one has to consider the engine torque at the required launch rpm and torque multiplication of the Allison torque converter. Manual and automated manual transmissions have to launch at very low engine rpm in order to prevent damage to the clutch. This means less torque, which is why they have very deep 1st gear ratios to help them overcome their clutch limitations. An Allison Automatic uses the full torque from the engine and multiplies it with the torque converter. Then, when the 1st gear ratio and rear axle ratio are factored in, the Allison provides greater startability.

Smooth, Robust Acceleration

Allison's proven Continuous Power Technology provides smooth, seamless acceleration, without the uncomfortable and load destabilizing lurches that characterize manual and automated manual transmissions.

"GOOD ACCELERATION, STILL KEEPS ENGINE RPM LOW FOR BEST FUEL ECONOMY. HOLDS SPEED WELL GOING UP HILLS."

Richard Boone, driver
Hogan Leasing | St. Louis, MO

Allison Transmission

Ratings and Specifications

RATINGS

MODEL	MAX INPUT POWER hp (kW)	MAX INPUT TORQUE[1] lb-ft (N•m)	MAX OUTPUT TORQUE[1] lb-ft (N•m)	MAX TURBINE TORQUE[2,3] lb-ft (N•m)	MAX GVW lbs (kg)	MAX GCW lbs (kg)
TC10	600 (447)	1700 (2305)	13,000 (17,630)	1750 (2372)	-	80,000 (36,288)

1 Gross power rating as defined by ISO 1585 or SAE J1995. 2 Turbine Torque limit based on iSCAAN standard deductions.
3 Lower Range Torque Protection (LRTP) required to limit turbine torque and to limit output torque to 13,000 lb-ft (17,625 Nm) or less.

GEAR RATIOS - TORQUE CONVERTER MULTIPLICATION NOT INCLUDED

RANGE	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINETH	TENTH	STANDARD REVERSE	ALTERNATE REVERSE
RATIO	7.40:1	5.44:1	4.251:1	3.43:1	2.94:1	2.16:1	1.59:1	1.24:1	1.00:1	0.86:1	-6.710:1	-1.957:1
STEP %	-	36%	28%	24%	17%	36%	36%	28%	24%	17%		

STANDARD POWER TAKEOFF PROVISION[2]

BASE MODEL	MOUNTING	MAXIMUM VALUE lb-ft (N•m)	DRIVE SPEED rpm
TC10	Rear		1.28 x Turbine Speed
Continuous Operation[1]		475 (645)	
Intermittent Operation		650 (880)	

1 Drive shaft torque must not exceed continuous rating for more than one-third of the PTO operation. 2 The PTO Provision is optional for the TC10. All TC10 Transmissions have a PTO pad and cover located on the rear cover. The TC10 includes the PTO drive shaft if the PTO option is ordered with the transmission. Contact your Allison representative for more information.

OIL SYSTEM

BASE MODEL	CAPACITY[1] quarts (liters)
TC10	56[2] (53)[2]

Recommended oil types for all models is Allison Approved TES 295 transmission fluid.

1 Amount to fill a dry transmission after assembly and rebuild. The initial fill for a transmission as received from the Allison factory will be less. Residual fluid remains in the transmission after acceptance testing.

2 Transmission only. Does not include external circuits or additional volume which may be required if installed angle of the transmission is greater than zero degrees.

ENGINE SPEEDS

MODEL	FULL LOAD GOVERNED SPEED Min-Max (rpm)	IDLE SPEED IN DRIVE Min-Max (rpm)	OUTPUT SHAFT SPEED FORWARD rpm
TC10	1700-2100	600-800	2440

PHYSICAL DESCRIPTION

BASE MODEL	LENGTH[1] in (mm)	OIL PAN DEPTH[2] in (mm)	DRY WEIGHT lbs (kg)
TC10	39.01 (990.9)	16.83 (427.5)	1074 (487)

1 Length from the engine transmission split line to the yoke attachment. 2 Depth below the transmission centerline.

TORQUE CONVERTER SPECIFICATIONS

BASE MODEL	TORQUE CONVERTER	NOMINAL STALL TORQUE
TC10	TC-633	1.84

Allison Has You Covered

Our extensive network of over 1,200 authorized Allison Distributors and Dealers in North America means convenient, factory-quality Allison Transmission service is always close at hand.

ALLISON BRAND PROMISE

The Allison Brand Promise is the automatic experience with an unrivaled combination of Quality, Reliability, Durability, Vocational Value, and Customer Service.

www.allisontransmission.com

P.O. Box 894, Speed Code PF3
Indianapolis, Indiana 46206-0894

Information or specifications subject to change without notice or obligation.

SA7295EN (2014/01)
ISO/QS 9000 and ISO 14001 Certified

Allison Transmission