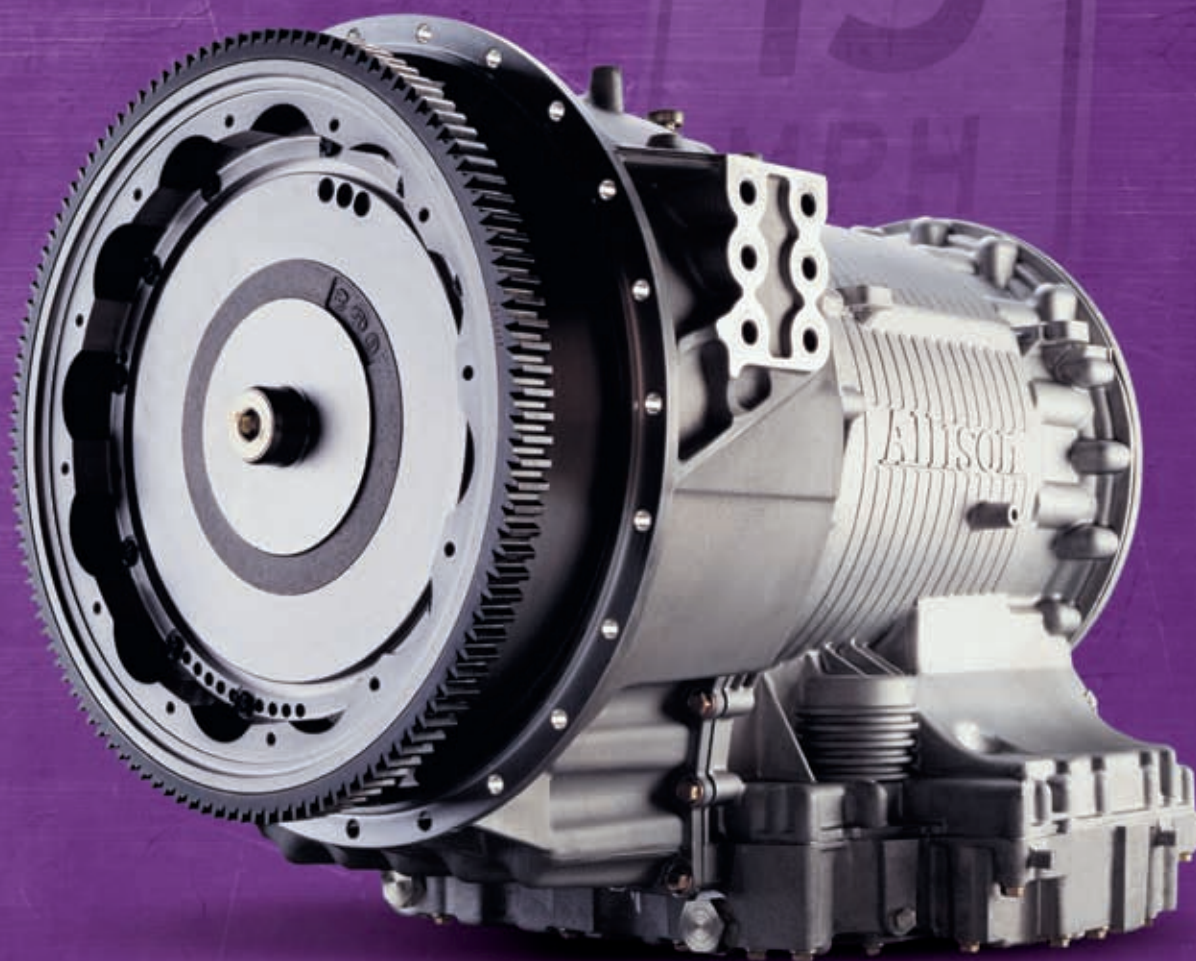




DRIVING TRANSMISSION TECHNOLOGY®

TRUCK RV SERIES





Allison Truck RV Series fully automatic transmissions offer more power and more performance for more enjoyment on the open road. Specifically designed for truck recreational vehicles, these models provide smooth, full-power shifts for faster acceleration and enough torque to handle steep grades with ease.

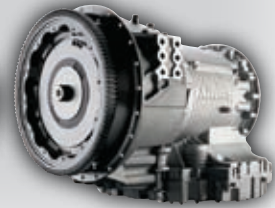
Proven reliability and durability. Allison Transmission has built a reputation on our ability to build transmissions that last just about forever. Allison Automatics are truck-based transmissions designed to withstand the rigors of the road and engineered for efficient, effective, long-term, worry-free operation.



ENGINE	hp (kW)	TORQUE	lb-ft (N • m)
200-600	(149-447)	520-1850	(705-2508)
GVW	lbs (kg)	14,000-unlimited (6,350-unlimited)	



3000 TRV
3200 TRV



4000 TRV

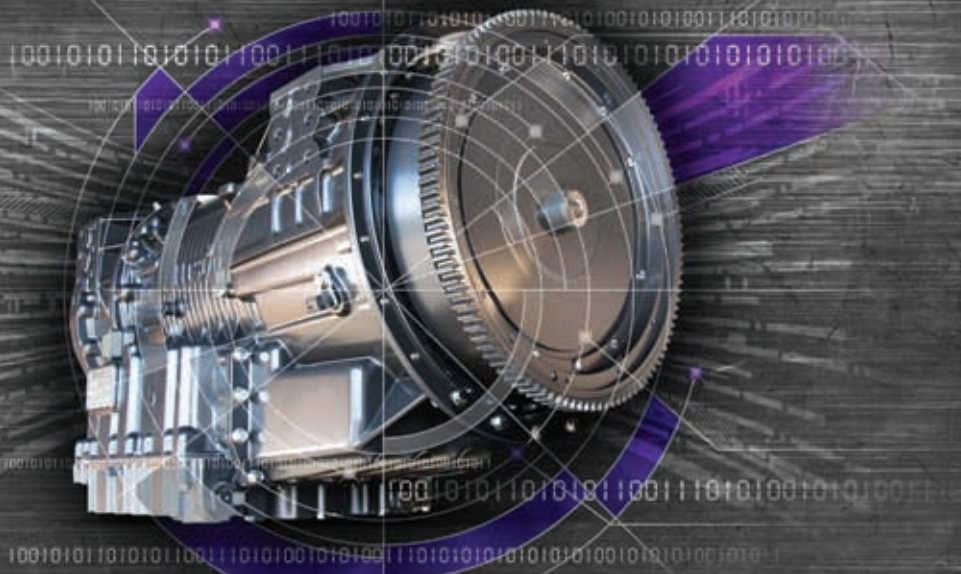
Startability. Startability is a vehicle's capability to launch and pull a load. Simply put, it's the 'grunt' or 'get-up-and-go' of a truck. Often only the 1st gear ratio is used to judge a vehicle's startability. The truth is, one has to consider the engine torque at the required launch rpm and torque 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.



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.





Smart controls. Allison Truck/RV Series automatic transmissions have brains in addition to brawn. Special electronic control packages provide precisely the performance features you need to enjoy the open road — wherever it may take you.

Prognostics

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

Secondary Shift Schedule

Select between two pre-programmed shift patterns — quickly and easily. Match shift characteristics to the driving conditions with the simple push of a button.

Manual Gear Select

Manually control upshifts and downshifts, if you prefer, when driving in mountains or other kinds of rough terrain. The transmission will not allow you to select a range that will over-speed the engine.

Shift Energy Management (SEM)

Provides better engine/transmission integration to optimize the entire driveline system. The result is faster, smoother, more consistent shift quality, increased powertrain durability, improved performance and an overall more efficient vehicle operation leading to greater fuel economy.

Retarder Enable

Get the best braking possible through total transmission retarder/vehicle integration. Electronic controls precisely blend the transmission, retarder and service brakes for peak efficiency.

Auxiliary Function Range Inhibit

It's like an extra set of eyes to help avoid unwanted shifts out of Neutral. Integrates with virtually any vocational vehicle component.

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

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



No power interrupts. On a vehicle with an automated manual transmission, the power interrupts that occur during shift changes result in lower average wheel horsepower. With an Allison Automatic, there is no power interrupt during shift changes so Allison Automatics can make full use of the engine's horsepower. No power interrupts also contribute to a smoother ride.

CONSISTENT SMOOTH
ACCELERATION & RIDE

AHEAD

Comprehensive coverage. All Allison Truck RV Series models offer two-year Standard Warranty with 100% parts and labor. An additional three years of Extended Transmission Coverage is also available. Coverage may vary by model. Contact your Allison representative for details.

Our extensive network of over 1,200 authorized Allison Distributors and Dealers in North America, along with over 1,500 worldwide, means convenient, factory-quality Allison service is always close at hand.

Keeping it safe. Since an Allison Automatic is a true, fully automatic transmission, the driver has more time to check mirrors and to look forward and behind. There simply aren't as many distractions. And that gives the driver more time to do what's necessary. And what's necessary is being safe on the road.

Torque converter. Increased shifting performance, faster acceleration, greater operating flexibility and minimal rollback are all advantages attributed to the patented heavy-duty Allison torque converter. The torque converter's cushion effect reduces shock and strain on all driveline components.



Information Highway

Visit **www.allisontransmission.com** for a comprehensive library of informational brochures, including Mechanic's Tips, Operator's Manuals, Parts Catalogs, Troubleshooting Flyers and Service Manuals.

Ratings and Specifications

RATINGS

MODEL	RATIO	MAX INPUT POWER ¹	MAX INPUT TORQUE ¹	MAX INPUT TORQUE w/SEM OR TORQUE LIMITING ^{1,2}	MAX TURBINE TORQUE ³	MAX GVW	MAX GCW
		hp (kW)	lb-ft (N • m)	lb-ft (N • m)	lb-ft (N • m)	lbs (kg)	lbs (kg)
3000 TRV	Close Ratio	310 (231)	950 (1288)	n/a	1700 (2305)	—	40,000 (18,144)
3200 TRV	Close Ratio	450 (336)	1200 (1627)	1250 (1695)	1700 (2305)	—	—
4000 TRV	Close Ratio	600 (447)	1850 (2508)	n/a	2800 (3795)	52,000 (23,587)	72,000 (32,659)

1 Gross ratings as defined by ISO 1585 or SAE J1995. 2 SEM = engine controls with Shift Energy Management. 3 Turbine torque limit based on ISCAAN standard deductions.

GEAR RATIOS – TORQUE CONVERTER MULTIPLICATION NOT INCLUDED

MODEL	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	REVERSE
3000 TRV	3.49:1	1.86:1	1.41:1	1.00:1	0.75:1	0.65:1	-5.03:1
3200 TRV	3.49:1	1.86:1	1.41:1	1.00:1	0.75:1	0.65:1	-5.03:1
4000 TRV	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	-4.80:1

ENGINE SPEEDS

MODEL	FULL LOAD GOVERNED SPEED	IDLE SPEED IN DRIVE	OUTPUT SHAFT SPEED
	Min-Max (rpm)	Min-Max (rpm)	rpm
3000/3200 TRV	2000-2800	500-800	3600 ¹
4000 TRV	1700-2300	500-800	—

1 Retarder-equipped models only.

OPTIONAL RETARDER PROVISION – INTEGRAL, HYDRAULIC TYPE

BASE MODEL	TORQUE CAPACITY lb-ft (N • m)	POWER CAPACITY hp (kW)
3000 TRV		
– High	1600 (2170)	600 (447)
– Medium	1300 (1760)	500 (373)
– Low	1100 (1490)	400 (298)
4000 TRV		
– High	2000 (2710)	600 (447)
– Medium	1600 (2170)	600 (447)
– Low	1300 (1760)	500 (373)

OPTIONAL POWER TAKEOFF PROVISION – CONTINUOUS OPERATION

BASE MODEL	MOUNTING PAD POSITIONS VIEWED FROM REAR	DRIVE GEAR RATING WITH ONE PTO lb-ft (N • m)	DRIVE GEAR RATING WITH TWO PTOS lb-ft (N • m)	DRIVE
3000 TRV	4 and 8 o'clock	485 (660)	685 ¹ (930) ¹	Engine
4000 TRV	1 and 8 o'clock	685 (930)	1175 ¹ (1595) ¹	Engine

1 Total on the drive gear. Minimum 600 rpm idle speed required when dual PTOs are used simultaneously.

PHYSICAL DESCRIPTION

BASE MODEL	LENGTH ¹	DEPTH ² w/DEEP OIL PAN/SUMP	DEPTH ² w/SHALLOW OIL PAN/SUMP	DRY WEIGHT
	in (mm)	in (mm)	in (mm)	lbs (kg)
3000 TRV				
– Basic model	28.29 (718.6)	12.90 (327.8)	11.14 (283.1)	535 (243)
– With PTO only	32.49 (825.4)	12.90 (327.8)	11.14 (283.1)	575 (261)
– With retarder only	28.29 (718.6)	12.90 (327.8)	11.14 (283.1)	615 (279)
– With PTO & retarder	32.49 (825.4)	12.90 (327.8)	11.14 (283.1)	655 (298)
4000 TRV				
– Basic model	30.54 (775.8)	14.75 (374.7)	13.17 (334.6)	831 (377)
– With PTO only	33.42 (848.8)	14.75 (374.7)	13.17 (334.6)	893 (405)
– With retarder only	30.54 (775.8)	14.75 (374.7)	13.17 (334.6)	906 (411)
– With PTO & retarder	33.42 (848.8)	14.75 (374.7)	13.17 (334.6)	968 (439)

1 Length measured from flywheel housing to end of output shaft. 2 Depth measured below transmission centerline.

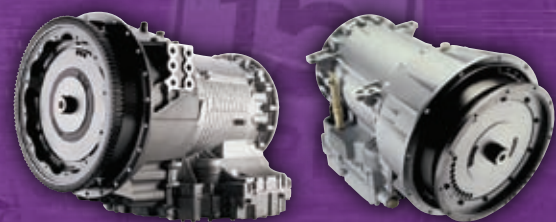
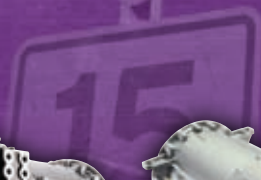
OIL SYSTEM

BASE MODEL	CAPACITY ¹	MAIN CIRCUIT FILTER	LUBE CIRCUIT FILTER	ELECTRONIC OIL LEVEL SENSOR (OLS)
	quarts (liters)			
3000 TRV		Integral	Integral	Standard
– Deep Oil Sump w/o PTO	29 (27.4)			
– Shallow Oil Sump w/o PTO	26 (24.6)			
4000 TRV		Integral	Integral	Standard
– Deep Oil Sump and PTO	51 (48)			
– Deep Oil Sump w/o PTO	48 (45)			

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

1 Transmission only. Does not include coolers, hoses or fittings. Amount of oil necessary to fill a dry transmission.

TRUCK RV SERIES



Ask for an Allison. See your dealer for a complete listing of vehicles featuring Allison fully automatic transmissions, or contact your Allison representative. For the representative close to you, visit www.allisontransmission.com.