

Safe driving intelligence. Allison Truck RV Series automatic transmissions provide customized performance at your fingertips. The transmission will automatically select gears based on engine rpm, throttle position, vehicle load and road speed. However, you can manually control the upshifts and downshifts when it is necessary for safe 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.

Keeping it safe. The driver in an Allison-equipped vehicle has more time to check the 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.

Wheel horsepower vs. hood horsepower.

On a vehicle equipped with a manual or an AMT, the power interrupts that occur during shift changes diminish the engine's inertia energy and result in lower average wheel horsepower. Because the engine isn't working efficiently, it can't run at full load.

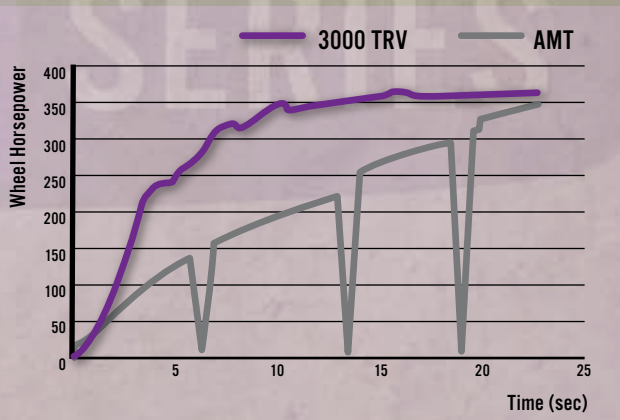
With an Allison Automatic, there are no power interrupts during shift changes. The inertia energy built up by the engine is maintained and this equates to higher wheel horsepower. As a result, you don't need as much engine horsepower for your recreational vehicle so you save money in the long run.

Torque Converter. The torque converter is the most obvious component that elevates an Allison Automatic above other transmissions. The heavy-duty Allison torque converter is at the heart of what makes an Allison Automatic the most effective, efficient and productive commercial transmission in the world. Increased shifting performance, faster acceleration, greater operating flexibility and minimal roll-back are all advantages that can be attributed to it. Its cushion effect reduces shock and strain on the entire driveline – including engine, universal joints, driveshafts and rear axle – prolonging the operating life of the components.

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 roll on down open highways, city streets, country roads, even off-road excursions.

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.

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.



Ask for the Allison

TRUCK RV SERIES

Ask your truck dealer for a complete listing of vehicle models featuring Allison Truck RV Series transmissions, or contact your Authorized Allison Distributor. For the representative close to you, visit www.allisontransmission.com.

DRIVING TRANSMISSION TECHNOLOGY™



TRUCK RV SERIES

Allison Truck RV Series 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 automatic shifts for faster acceleration and enough torque to handle steep grades with ease.



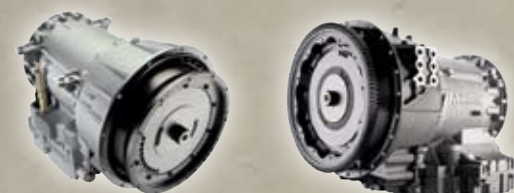
All the muscle you need. Allison's adaptive-shifting technology allows the transmission to monitor rpm, load and road conditions. It senses when to downshift to control speed on downhill grades and when to upshift to provide optimum acceleration for merging into highway traffic. So you can sit back, relax and enjoy the ride.



Life cycle value. When you factor in all life cycle costs – vehicle purchase price, insurance, fuel, tires, preventive maintenance, component repair and retail resale value – along with faster acceleration, smoother operation and easier handling – an Allison Automatic-equipped truck recreational vehicle costs less per mile than a comparable model equipped with an automated manual transmission (AMT).

ENGINE hp (kW)	TORQUE lb-ft (N • m)
310-550 (231-410)	950-1770 (1288-2400)
GVW lbs (kg)	
unlimited	

Allison Transmission Fourth Generation Electronic Controls



3000 TRV, 3200 TRV

4000 TRV

Any truck-based recreational vehicle requires an Allison Truck RV Series automatic transmission.

Type C Motorhomes Class 6-8

The real thing. Allison Automatics are truck-based transmissions designed to withstand the heavy-duty rigors of the road and engineered for efficient, effective, long-term, worry-free operation.

Maintenance made easy. Routine oil and filter changes are the only regular preventive maintenance required with an Allison Automatic. And, using TranSynd™ synthetic transmission fluid helps extend oil change intervals up to 600% for most applications.

Information highway. If you are thinking of the great American adventure, make sure you take an Allison Truck RV Series automatic transmission along for the drive. For more information, visit www.allisontransmission.com.



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	425 (316)	1200 (1627)	1250 (1695)	1700 (2305)	—	—
4000 TRV	Close Ratio	550 (410)	1770 (2400)	n/a	2600 (3525)	—	—

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	2000-2800	500-800	3600 ¹
4000	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		
- High	1600 (2170)	600 (447)
- Medium	1300 (1760)	500 (373)
- Low	1100 (1490)	400 (298)
4000		
- High	2000 (2710)	600 (447)
- Medium	1600 (2170)	600 (447)
- Low	1300 (1760)	500 (373)

TORQUE CONVERTER SPECIFICATIONS		
BASE MODEL	TORQUE CONVERTER	NOMINAL STALL TORQUE
3000		
	TC-411	2.71
	TC-413	2.44
	TC-415	2.35
	TC-417	2.20
	TC-418	1.98
	TC-419	2.02
	TC-421	1.77
4000		
	TC-521	2.42
	TC-531	2.34
	TC-541	1.90
	TC-551	1.79
	TC-561	1.58

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				
- 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				
- 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		Integral	Integral	Standard
- Deep Oil Sump w/o PTO	29 ² (27.4) ²			
- Shallow Oil Sump w/o PTO	26 ² (24.6) ²			
4000		Integral	Integral	Standard
- Deep Oil Sump and PTO	51 ² (48) ²			
- Deep Oil Sump and PTO	48 ² (45) ²			

Recommended oil types for all models are TranSynd™/ TES 295 approved.

1 Transmission only. Does not include coolers, hoses or fittings. 2 Amount of oil necessary to fill a dry transmission.

OPTIONAL POWER TAKEOFF PROVISION - CONTINUOUS OPERATION				
BASE MODEL	MOUNTING PAD POSITIONS VIEWED FROM REAR	DRIVE GEAR RATING WITH ONE PTO	DRIVE GEAR RATING WITH TWO PTOS	DRIVE
		lb-ft (N • m)	lb-ft (N • m)	
3000 ¹	4 and 8 o'clock	485 (660)	685 ² (930) ²	Engine
4000 ¹	1 and 8 o'clock	685 (930)	1175 ² (1595) ²	Engine

1 PTO-delete option available. 2 Total on the drive gear.