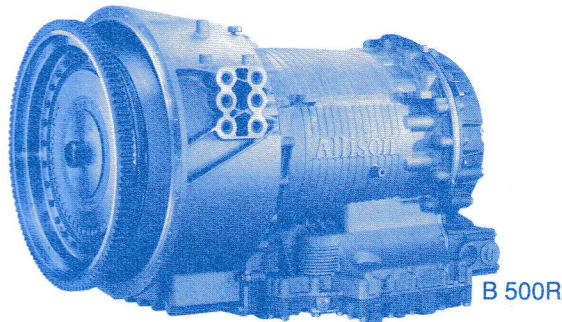


Allison World Transmission



**Automatic Models
B 500/B 500R
up to 450 ghp (335 kW)
for intercity, transit and
articulated buses**

Specifications

	Transit	Intercity
Gross input power (maximum)	400 hp (298 kW)	450 hp (335 kW)
Gross input torque (maximum)	1300 lb ft (1762 N•m)	1460 lb ft (1978 N•m)
Rated input speed (minimum-maximum)	1600-2300 rpm	1600-2300 rpm

Mounting

Engine SAE #1 flywheel housing, flex disk drive
Chassis 18 bolt min. flange mount or 6 bolt side pads

Torque converter

Type One stage, three element, polyphase
Stall torque ratio TC 521-2.4; TC 531-2.3; TC 541-1.9; TC 551-1.8; TC 561-1.6
Lockup clutch with torsional damper Integral/standard

Gearing

Type Patented, constant mesh, helical, planetary

Range	Ratios*	Available in
First	3.51:1	4, 5, or 6-speed
Second	1.91:1	shift
Third	1.43:1	calibrations.
Fourth	1.00:1	
Fifth	0.74:1	
Sixth	0.64:1	
Reverse	4.80:1	

Ratio coverage

Forward (5 speed) 5.48:1

*Gear ratios do not include torque converter multiplication.

Oil system

Oil type C4, MIL-L-2104, MIL-L-46167, DEXRON®-II, DEXRON®-IIE
Capacity (excluding external circuits) Initial fill 47 US qts (45 liters)
Oil change 37 US qts (39 liters)
Filters – main & cooler Replaceable element, integral
Heat exchanger type Oil to water, integral or remote-mount available

Size

	B 500	B 500R
Length (FW housing to output flange face)	34.0 in (865 mm)	34.0 in (865 mm)
Depth (centerline to lowest point)	13.1 in (328 mm)	13.1 in (328 mm)
Weight (dry)**	831 lbs (378 kg)	906 lbs (412 kg)

**Weight includes output flange/yoke and engine adaptation.



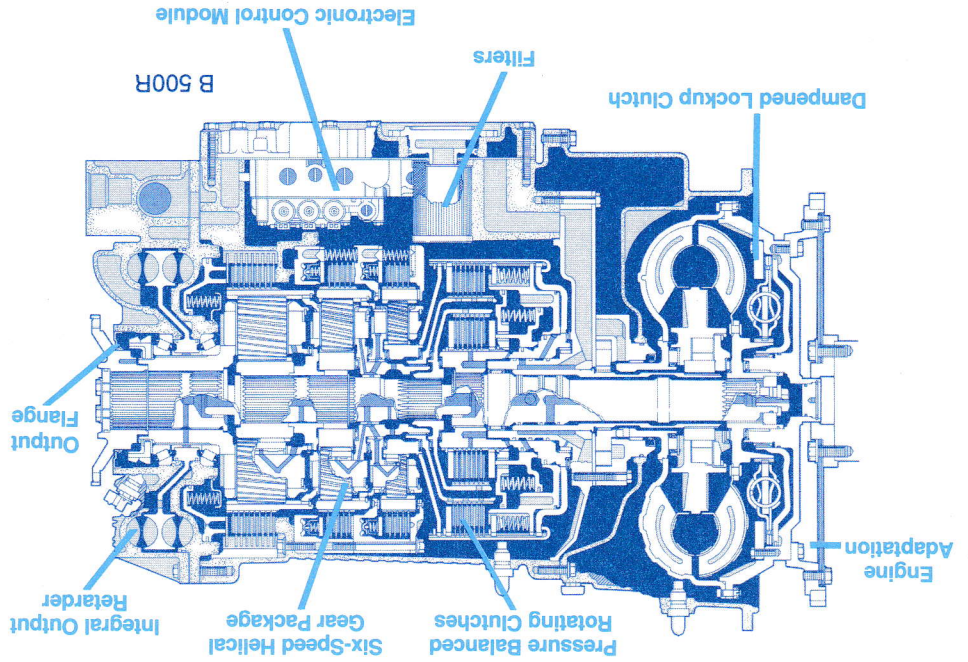
Allison Transmission
 P.O. Box 894, Speed Code PF3
 Indianapolis, Indiana 46206-0894
 1-800-2525ATD

Design Features

- The WT Bus Series incorporates the latest technology in design and manufacturing techniques.
- Hydraulic torque converter with lock-up clutch and integral torsional vibration damper, planetary gear package, and oil pump on one concentric axis.
- Unique patented helical gear arrangement provides 4, 5, or 6-speeds in a compact package.
- The electronic control system is standard equipment. This includes a pushbutton selector and wiring harness.
- Integral externally accessible cartridge type oil filters simplify maintenance.
- Pressure balanced rotating clutches provide quick, smooth shifts to the adaptive controls tailor shifts to the driving conditions.
- The basic B 500R includes as standard:
 - Integral retarder

- Remote oil cooler
 - Output flange/yoke
 - Engine adaptation*
 - Shallow sump for ground clearance
 - Oil level sensor
 - Two year bus warranty
 - Secondary shift schedule
 - Integral pushbutton or lever selector with max feature ECU
 - Throttle position sensor (TPS)
 - Wiring harness
 - Vehicle interface module (VIM)
- Certain features listed above can be handled as delete options.
- The following add options are available direct from Allison and also carry the full WT transmission warranty:
- Remote shift selector
 - Power takeoff provision (adds 3.8 in to length of the transmission)
 - Power takeoff units
 - Direct-mount oil cooler

*Base price will vary if other than specified adaptation is requested



Transmission Cross-section

SCAAN Specification Assistance. To be sure that you get the most efficient engine/transmission package for your operation, in your territory, with your preferred vehicle, your local Allison Transmission Division distributor offers SCAAN (System for Computerized Application Analysis) to help take the guesswork out of vehicle-buying specification decisions. SCAAN can compute a wide variety of vehicle performance parameters; and will also check your powertrain specifications against Allison Transmission vocational experience to optimize vehicle performance.

