

# TREMEC

Torque Transfer Solutions™

## Medium-Duty Commercial Vehicle 7-Speed Synchronized Manual Transmissions

TREMEC 7-speed synchronized manual transmissions are designed to provide optimal durability, ease of shifting and low ownership costs. They are ideally suited for local pick-up and delivery operations.

These robust, easy-to-maintain transmissions feature a modular, end-load case design and positive gear engagement with the patented OPTI-RAIL™ shift rail system.

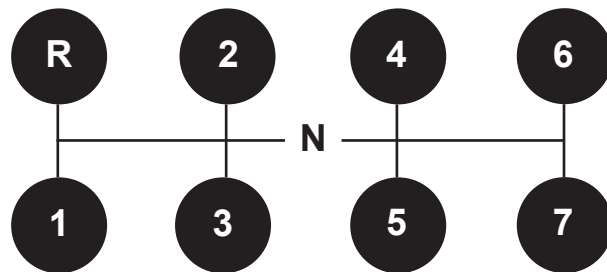
The OPTI-RAIL system eliminates shift rail fasteners on the high-duty cycle forward synchronized gears. The only fasteners that remain are found on the first/reverse shift fork, which is not exposed to the same abuses as other forward gears.

OPTI-RAIL's unique design gathers all the shift rails between two welded side channels. Each shift fork is attached to an individual rail, and to both side channels. Stress is distributed evenly throughout the structure, providing greater strength. Overall stiffness has been improved by 100%, virtually eliminating shift fork deflection.

TREMEC Medium-Duty transmissions feature Taper Lok™ shift collars and synchronizers that improve shift quality and performance while helping prolong transmission life. Taper Lok works with the main shaft, drawing the gears into position and locking them firmly in place.

The dual pivot-point Gimbal Shift Tower dampens and absorbs mechanical and sound vibrations from the driver. The result is a tighter shift pattern, a smooth and definitive gear engagement and quieter operation.

### Shift Pattern





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Specifications	
Type:	Seven-speed rear wheel drive manual transmission; direct or overdrive available
Torque Capacity:	TR-S56-7B: 560 lb.-ft. (760 Nm); TR-SO66-7B: 660 lb.-ft. (900 Nm)
Input Shaft	1-1/2 inch or 1-3/4 inch 10 spline
Output Shaft	2 inch 38 tooth rolled spline
Case:	End load design
Overall Length:	35 inches (889 mm)
Clutch Housing:	SAE No. 2 Iron
Synchronized Gears:	2 through 7
Lubricant Type:	SAE 50 Wt. heavy-duty engine oil
Lubricant Capacity (approximate):	22 pints (10.4 liters)
Transmission Weight:	Dry: 454 lbs (206 kg)
Power Take-Off (PTO):	6 bolt, right and left side
Power Take-Off Speed:	TR-S56-7B: 49.0% engine speed ; TR-SO66-7B: 66.0% engine speed

Gear Ratios				
Gear	TR-S56-7B		TR-SO66-7B	
	Ratio	% Step	Ratio	% Step
1	10.09		7.48	
2	5.98	69	4.43	69
3	3.72	61	2.76	61
4	2.56	45	1.90	45
5	1.81	41	1.34	42
6	1.35	34	1.00	34
7	1.00	35	0.74	35
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