

TREMEC®

Torque Transfer Solutions™

Heavy-Duty Commercial Vehicle 13-Speed Dual Counter Shaft (Non-Synchronized) Manual Transmission

The TREMEC 13-speed manual transmission offers unsurpassed ratio coverage, fuel economy, reliability, and overall versatility.

Built to withstand up to 2,050 lb-ft of torque, this sturdy 13-speed was designed to tame demanding high performance diesel applications, while simultaneously offering excellent startability and “gradability” characteristics.

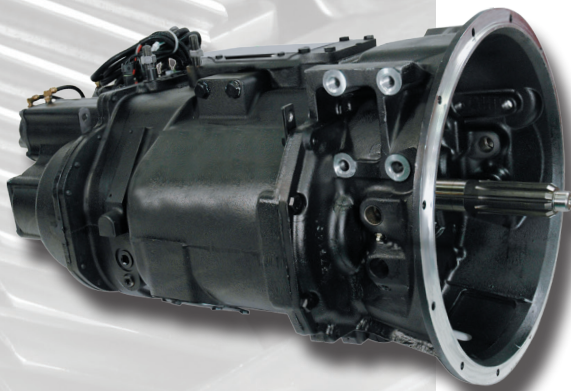
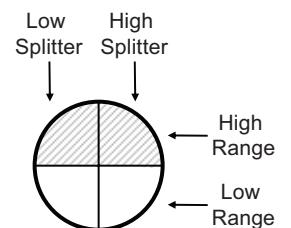
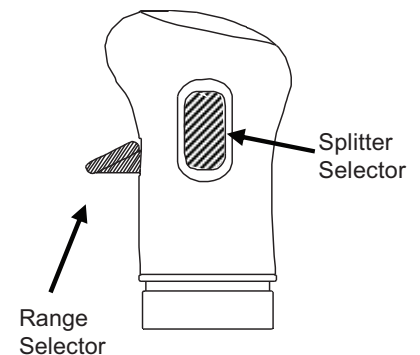
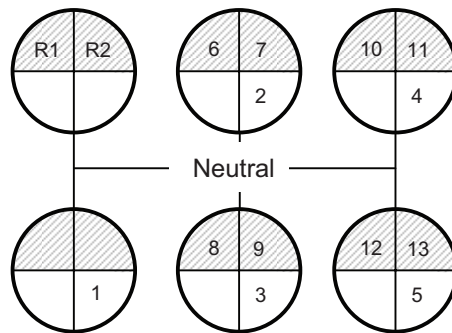
A deep first gear ratio gets even the heaviest loads moving with ease, while a double overdrive package (ending with a 0.70:1 ratio) keeps fuel savings at a maximum over the long haul.

The TREMEC 13-speed manual transmission features the patented Optilube™ system that provides an internal oil pump and a simple, effortless distribution system to spray lubricant continuously and directly onto all critical gear sets and bearings.

Ideally suited to over-the-road applications where heavy loads and steep grades are common, key features and benefits of the TREMEC 13-speed include:

- Double overdrive delivers improved fuel economy
- Range synchronizer for fast pneumatic shifts
- Aluminum clutch housing reduces weight
- Patented Optilube™ system provides internal lube pump and pressurized distribution system to ensure adequate lubrication at all times
- Driver friendly ergonomics and easy-to-learn common shift pattern

Shift Pattern





Torque Transfer Solutions™

Heavy-Duty Commercial Vehicle

13-Speed Dual Counter Shaft (Non-Synchronized) Manual Transmission

Specifications	
Type:	13-speed rear wheel drive manual transmission; double overdrive
Torque Capacity:	Up to 2050 lb-ft (2780 Nm)
Length:	37.7 inches (957.5 mm)
Weight:	794 lbs (360 kg)
End Yoke:	SPL-250, 1810, 1710 series
Clutch Housing:	SAE No. 1 Aluminum
Lube System:	Optilube™ System
Lube Type:	SAE 50 (<i>Mineral or synthetic accepted</i>)
Lube Capacity:	29.5 pints (14 liters)
PTO Openings:	6-bolt Right, 8-bolt Left
PTO Drive Gears:	Both sides, 52 teeth, 6 pitch gear. Both gears turn at 57% / 70% of engine speed.

Gear Ratios				
	TR-TDO-13A		TR-TDO-13B	
Gear	Ratio	% Step	Ratio	% Step
1	12.41		14.89	
2	8.66	43	10.40	43
3	6.10	42	7.32	42
4	4.21	45	5.05	45
5	2.95	43	3.54	43
6	2.47	19	2.47	43
7	2.06	20	2.06	20
8	1.74	18	1.74	18
9	1.45	20	1.45	20
10	1.20	21	1.20	21
11	1.00	20	1.00	20
12	0.84	19	0.84	19
13	0.70	20	0.70	20
R1	15.64		15.64	
R2	13.03		13.03	