

# TREMEC®

Torque Transfer Solutions™

## Heavy-Duty Commercial Vehicle 18-Speed Dual Counter Shaft (Non-Synchronized) Manual Transmission

The TREMEC 18-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 18-speed was designed to tame demanding high performance diesel applications, while simultaneously offering excellent startability and “gradability” characteristics.

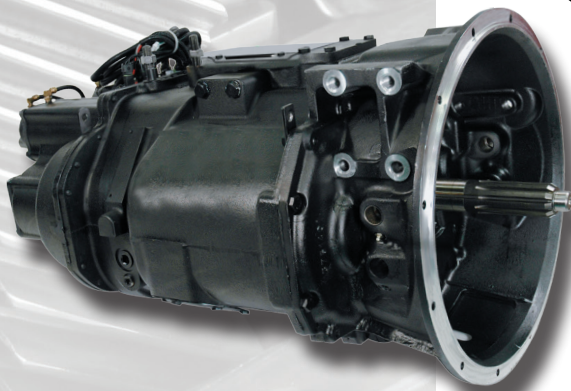
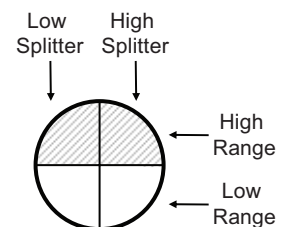
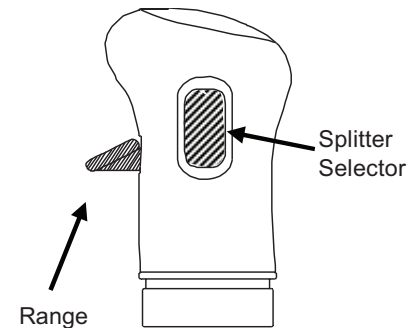
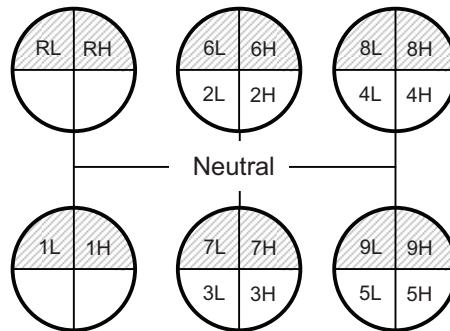
A deep first gear ratio of 14.89:1 gets even the heaviest loads moving with ease, while a double overdrive package (ending with a 0.70:1 ratio) keeps fuel savings at a maximum over the long haul.

The TREMEC 18-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 18-speed include:

- 21.87 overall ratio for wide ratio coverage with close steps
- 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





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## TR-TDO-18A Specifications

Type:	18-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

Gear	Ratio	% Step
1	14.89	
2	12.41	20
3	10.40	19
4	8.66	20
5	7.32	18
6	6.09	20
7	5.05	21
8	4.21	20
9	3.54	19
10	2.95	20
11	2.47	19
12	2.06	20
13	1.74	18
14	1.45	20
15	1.20	21
16	1.00	20
17	0.84	19
18	0.70	20
R1	15.64	
R2	13.03	
R3	3.72	
R4	3.10	