

OVER-THE-ROAD TRANSMISSION SPEC SHEET



BUILT FOR LONG-DISTANCE OPERATION

An over-the-road transmission should provide dependable shifting, controlled operating temperatures, and reliable performance across long distances. The build must match the truck's engine, weight, gearing, and normal operating conditions.

CHOOSE THE CORRECT TRANSMISSION

Both 13-speed and 18-speed transmissions can be configured for over-the-road use. The right platform depends on the truck's loaded weight, trailer configuration, terrain, driving speed, and the amount of ratio control required.

MATCH THE ENGINE

The transmission should keep the engine within its effective operating range. Engine model, horsepower, torque, governed RPM, and normal cruising RPM must be considered when planning the build.

SELECT THE RIGHT GEARING

Transmission ratios should work together with the differential ratio and tire size. Correct gearing can improve starting ability, pulling performance, shift quality, and highway cruising RPM.

CONSIDER WEIGHT AND TERRAIN

Heavy loads, gravel trains, doubles, steep grades, and frequent starts may require different gearing than lighter highway applications. The transmission should be configured around the truck's actual working conditions.

REVIEW THE CLUTCH AND DRIVELINE

Clutch condition, driveshaft geometry, U-joint angles, transmission mounts, suspension position, and axle placement can affect transmission performance. These components should be inspected as part of the complete drivetrain setup.

CONTROL OPERATING TEMPERATURE

Transmission temperature is affected by lubricant, gearing, vehicle weight, road speed, terrain, cooling, and driveline condition. Correct setup may help control excessive heat, but every contributing factor must be evaluated.

PROVIDE ACCURATE INFORMATION

For an accurate recommendation, provide the truck's year, make, and model; transmission identification; engine specifications; clutch type; differential ratio; tire size; typical loaded weight; trailer configuration; normal routes; operating RPM; and current problems.

PLAN THE COMPLETE BUILD

There is no single transmission setup that works for every over-the-road truck. Each build should be planned around the complete vehicle and the driver's goals for durability, performance, temperature control, and shift quality.