



Torque-Drive® Synthetic Automatic Transmission Fluid

AMSOIL recommends Torque-Drive® for use in all automatic transmissions requiring any of the following specifications: Allison® TES 295, TES 389, C-4; Voith® 55.6336.XX; ZF® TE-ML 14C; GM Dexron® III; Ford Mercon®; Mercedes-Benz® 236.10

Engineered to eliminate deficiencies common to all conventional petroleum ATFs, AMSOIL Torque-Drive provides superior performance and protection against thermal and oxidative degradation, sludge and varnish formation, viscosity shear down, cold-temperature oil thickening, poor friction stability, high component wear and shortened oil life. Automatic transmission operating expenses can be directly linked to transmission fluid quality. Poor-quality oils need frequent changes and reduce the effective service life of transmissions. Delivering maximum oxidation resistance, wear control and friction performance, AMSOIL Torque-Drive extends lubricant life and provides protection beyond that possible from conventional ATFs. Immediate financial benefits are possible upon the installation of AMSOIL Torque-Drive. Vehicles stay on the road longer, unnecessary labor and maintenance costs are reduced, and the return on costly transmission investments is maximized.



Thermal and Oxidative Stability

Hot operating conditions are no excuse for poor transmission reliability. By delivering a slower-than-normal oxidation rate, AMSOIL Torque-Drive helps prevent sludge that blocks small valves and varnish that restricts component movement, and reduces oil thickening that slows shift times. AMSOIL Torque-Drive lasts longer than conventional ATFs, protects better than conventional ATFs and extends transmission life beyond that possible with conventional ATFs.

Shear Stable

Conventional automatic transmission fluids use petroleum oils with viscosity index (VI) improvers added to increase the oil's operational temperature range. Over time, VI improvers shear down, promoting premature wear by leaving only a thin base oil to protect vital transmission components. AMSOIL Torque-Drive does not contain VI improvers, which means no VI improver shear-down regardless of the operating environment. The exceptional film strength of AMSOIL Torque-Drive greatly reduces wear, promoting longer transmission service life.

Friction Durability

Oxidation by-products destroy the sensitive friction characteristics of transmission fluids, resulting in the rapid degradation of shift quality. The thermal and oxidative stability inherent in AMSOIL Torque-Drive helps ensure consistent, smooth clutch engagement with no harsh shifting throughout the life of the fluid. AMSOIL Torque-Drive maintains proper coefficients of friction, and helps prevent clutch glazing and elongated shift times.

Extreme-Temperature Performance

Transmissions operate in temperature extremes. In hot temperatures, the synthetic construction of AMSOIL Torque-Drive virtually eliminates oil evaporation and delivers a better lubricating film than conventional oils for better overall protection of vital components. Oil consumption is reduced and transmissions require less maintenance.

In cold temperatures, AMSOIL Torque-Drive easily flows, as it does not contain the wax found in conventional ATFs. Cold-temperature fluidity allows for the proper operation of small, delicate, electronically controlled solenoids that affect gear changes. Unlike conventional ATFs, transmissions using AMSOIL Torque-Drive have quick response times during cold operation and can be used immediately upon startup.

TYPICAL TECHNICAL PROPERTIES

AMSOIL Torque-Drive® Synthetic Automatic Transmission Fluid (ATD)

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| Kinematic Viscosity @ 100°C, cSt (ASTM D445) | 7.4 |
| Kinematic Viscosity @ 40°C, cSt (ASTM D445) | 37.1 |
| Brookfield Viscosity @ -40°C, cP (ASTM D2983) | 8411 |
| Viscosity Index (ASTM D2270) | 170 |
| Flash Point, °C (°F) (ASTM D92) | 230 (446) |
| Pour Point, °C (°F) (ASTM D97) | -55 (-67) |
| Four-Ball Wear Test (ASTM D4172) @ 40 kg, 75°C, 1200 rpm, 1 hr Scar, mm. | 0.45 |
| Copper Strip Corrosion Test (ASTM D130) @ 150°C (302°F)/3 hr | 1B |

Spectrographical analysis

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|------------------|-----|
| Boron (ppm) | 133 |
| Calcium (ppm) | 28 |
| Phosphorus (ppm) | 230 |

PRODUCT APPLICATIONS

AMSOIL recommends Torque-Drive for use in heavy-duty, on- and off-highway automatic transmissions requiring any of the following specifications: **Allison®** TES 295, TES 389, C-4; **Voith®** 55.6336.XX; **ZF®** TE-ML 14C; **GM Dexron®** III; **Ford Mercon®**; **Mercedes-Benz®** 236.10. Examples of operations that benefit from using AMSOIL Torque-Drive include municipal or transit buses, motor coaches, garbage haulers, motor homes, delivery vans, emergency vehicles, school buses, dump trucks, utility vehicles, cement trucks, line haul trucks and tow trucks. Torque-Drive is designed to replace TranSynd® brand synthetic automatic transmission fluid for use in Allison® transmissions.

SERVICE INTERVAL

Torque-Drive is recommended for use according to the extended service interval established by the original equipment manufacturer for the performance specifications identified above under Product Applications.

AMSOIL PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit www.amsoil.com/warranty.aspx.

HEALTH AND SAFETY STATEMENT

This product is not expected to cause health concerns when used for the intended applications and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available online at www.amsoil.com or upon request at (715) 392-7101.

Keep Out of Reach of Children. Recycle used oil and bottle.



AMSOIL products and Dealership information are available from your local full-service AMSOIL Dealer.

Referral # 1161787

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