

Neglected Equipment: Drivetrains



Most people are aware of the importance of changing their motor oil. Oil life monitors, oil change centers and television commercials all serve as constant reminders. However, many people overlook the importance of changing their automatic transmission fluid and gear lube.

Severe-duty activities such as towing heavy trailers, hauling heavy loads, snow plowing and off-roading place an increased level of stress on drivetrain components. Modern transmissions and differentials are subjected to more horsepower, higher towing limits and hotter temperature extremes than their predecessors, and wear protection and oxidation resistance are more important than ever.

Transmissions run hot, often leading to transmission fluid oxidation that causes clutch glazing and deterioration in shift quality. Clutch glazing can be felt as an elongated, slipping or sluggish shifting feel, and it's usually a precursor to transmission failure. AMSOIL Multi-Vehicle Synthetic Automatic Transmission Fluid (ATF) and Fuel Efficient Synthetic Automatic Transmission Fluid (ATL) deliver outstanding performance in demanding operating conditions, resisting oxidation and providing increased lubricant film strength for maximum protection of transmission components.

The extreme pressures and temperatures generated by modern vehicles increase stress on gear lubricants and can lead to a serious condition known as thermal runaway. As temperatures in the differential climb upward, gear lubricants lose viscosity and load-carrying capacity. When extreme loads break the lubricant film, metal-to-metal contact occurs, increasing friction and heat. This increased friction and heat, in turn, results in further viscosity loss, which further increases friction and heat. As heat continues to spiral upward, viscosity continues to spiral downward. Thermal runaway is a vicious cycle that leads to irrepa-

rable equipment damage from extreme wear, and ultimately catastrophic gear and bearing failure.

AMSOIL Severe Gear® Synthetic Gear Lube demonstrates superior viscosity index (VI) and shear stability properties, and it is better-equipped to protect equipment against the devastating effects of thermal runaway. Severe Gear Synthetic Gear Lube is blended with superior high-viscosity-index, shear-stable synthetic base oils and an overtreatment of extreme-pressure additives that effectively protect high-stress applications against friction, heat and wear and keep equipment in top working order.

Studies reveal most differential wear occurs in the first 5,000 miles of operation. Because differentials go through a break-in period and are not equipped with filters

like transmissions and engines, the factory-fill differential gear lube must be changed rather quickly in order to drain the break-in wear particles. In fact, some original equipment manufacturers (OEMs) require the factory-fill differential gear lube be changed within the first 3,000 miles, or the first 500 miles if towing. Break-in wear particles allowed to remain in the differential mesh between the gears and cause gear or bearing wear or failure. Changing the factory-fill differential gear lube at the OEM recommendation, then switching to AMSOIL synthetic gear lube, ensures long, trouble-free differential life. ■

