# Keep Equipment Thoroughly Protected with AMSOIL Synthetic Polymeric Off-Road Grease

Grease-related maintenance on offroad equipment is labor intensive and requires a thorough knowledge of complete equipment lubrication requirements, while neglect or improper greasing can lead to poor equipment performance, unnecessary maintenance expenses and downtime.

# Maintenance-Related Suffering Points

 Difficult zerk (grease fitting) locations

Operator neglect

• Minimal standards for grease lubrication intervals

• Proper grease selection

# Zerks and Neglect

There are dozens of zerks on a variety of heavy-duty applications. Many zerk fittings are not only difficult to locate, but difficult to grease, even for experienced maintenance personnel. A mul-

titude of hard-to-locate fittings presents serious potential for missed grease points, causing drastic increases in component wear that can lead to component failure and equipment downtime. AMSOIL Synthetic Polymeric Grease provides the extra level of protection necessary to help overcome the problems associated with missed grease points and skipped lubrication intervals, staying in place longer and providing better lubrication for extended periods. By providing a safety margin for when grease points are missed, AMSOIL Synthetic Polymeric Grease allows extended equipment life and peace of mind, even during severe-service operation. In addition, AMSOIL Synthetic Polymeric Grease is formulated with 5 percent molybdenum disulfide (moly) for an extra level of protection, actively separating metal components when lubrication intervals are skipped.

# **Lubrication Intervals**

Standard original equipment manufacturer (OEM)-recommended greasing intervals fail to consider unique circumstances such as extreme service, company maintenance procedures or environmental conditions. Similar to automotive OEM-recommended oil drain intervals, recommended off-road equipment grease intervals do not consider the use of high-quality products such as AMSOIL Synthetic Polymeric Grease, which can safely extend lubrication intervals. Although following OEM guidelines is typically a good start for developing proper maintenance procedures, unique circumstances can alter interval requirements significantly.



### **Grease Selection**

Use of greases with incompatible thickening systems can result in severe equipment wear as certain incompatibilities can cause hardening or softening of grease in equipment components, jeopardizing protection. AMSOIL Synthetic Polymeric Grease incorporates a calcium-sulfonate complex thickener, which is compatible with nearly all major thickener types, including lithiumcomplex thickened greases.

#### **Operational Suffering Points**

- Grease pound-out
- Water washout
- Dirt and contaminant ingress

#### **Pound-Out Resistance**

The repetitive pounding action of everyday operation puts severe strain on equipment pivot points, causing inferior greases to pound out of place. When pound-out occurs, there is no base oil to provide proper separation of metal components, leading

to increased wear, and no seal to keep water and abrasive contaminants out, leading to rust, corrosion, pitting and component failure. AMSOIL Synthetic Polymeric Grease effectively resists pound-out and keeps equipment properly lubricated during extreme-pressure shock-loading and highimpact operation. To see a video of Synthetic Polymeric Off-Road Grease's superior pound-out resistance, go to www. amsoil.com/storefront/synthetic-grease.aspx.

#### Water Washout and Contaminant Ingress

Grease in heavy equipment is often subjected to environmental contaminants, including water. When inferior grease is exposed to water, it presents major potential for washout, or grease washing off the equipment components. This not only increases metal-to-metal contact and wear, but also the potential for rust and corrosion. AMSOIL Synthetic Polymeric Grease has exceptional adhesion and cohesion properties, allowing it to remain in place during wet operation and cleaning. It also provides one of the best water washout test (ASTM D1264) values in the industry (1%), effectively protecting metal components from the harmful effects of water contamination.

By providing superior sealing ability, AMSOIL Synthetic Polymeric Grease also overcomes problems created through contaminant ingress, actively deterring abrasive contaminants from entering pivot joints and providing better seal protection, maximizing equipment life. AMSOIL Synthetic Polymeric Off-Road Grease is designed to provide superior lubrication, protection and extended service intervals for virtually all off-road equipment grease points, including heavily-loaded pivot points, bushings, articulation points, machine implements, universal joints, driveline grease points, equipment wheel bearings and other grease-lubricated components. The following pictures present the greasing requirements for a typical backhoe application.





OEM recommendation: Lubricate backhoe arm, stick, bucket, cylinder bearings and linkage every 10 hours.

= Extreme Pound-Out Potential



OEM recommendation: Lubricate swing frame every 10 hours.



OEM recommendation: Lubricate loader bucket pivot and linkage every 10 hours.



OEM recommendation: Lubricate stabilizer bearings and cylinder every 10-50 hours.



OEM recommendation: Lubricate axle universal joints and kingpin bearings every 250 hours.

