

Oil or Grease: 7 Factors to Remember

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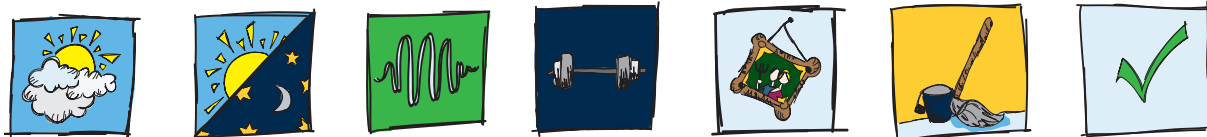
Maybe your gearbox leaks, and you are debating on whether or not to swap oil out for grease. Maybe your grease oxidizes at an impractical rate causing rust, and you're thinking oil might be a better option. Or maybe you're just tired of the sulfur-like smell that lingers on your hands after you've had to re-lubricate your application (or maybe you simply have no idea what to think about either lubricant type).

There's a good possibility that you might be right about changing lubricant types. However, you might also be missing several other key factors that could make your decision to switch more of a death wish for your motor than a solution to one of its problems.

The oil versus grease debate is much more complicated than simply thick or thin, long lifespan versus short, easy maintenance procedures versus harder ones. In fact, to put it in other terms, the oil and grease conundrum is much like the age-old reference to round and square pegs.

Regardless of shape, both peg types perform the same function, just as oil and grease do. However, depending on the peg hole, or in this case, the application, one is better suited for optimal performance than the other.

Typically, when deciding which lubricant to use—oil or grease—one must first consider the following seven factors:



1. **Climate** (What temperatures and weather conditions are typical of your area?)
2. **Hours of Operation** (Will motor usage be intermittent or continuous?)
3. **Motion** (How much movement needs to occur? How much heat will that produce?)
4. **Load** (How much stress will your application be under?)
5. **Orientation** (Is the lubrication fill level adequate for how the machine is mounted?)
6. **Cleanliness of Environment** (How exposed to the elements will your application be?)
7. **Efficiency** (How efficient must your application be?)

For the next four weeks, this blog will further expand on these seven contributing factors. The first will consider climate, the second will explore the effects of operation hours and vibration levels, the third will discuss load, and the final post will pursue the influences of application orientation, environmental cleanliness, and resulting efficiency.

