



By *DAVID EDER*. The realm of hydraulics is like none other in the lubrication world. Hydraulic oils do not require many of the additive advancements others need in the industry, but it is a misconception that all hydraulic oils are the same.



Prior to using budget oil



After using budget oil

WHAT ATTRIBUTES TO TRACTOR TRANSMISSION OIL BREAKING DOWN?

Several factors play a part in a tractor transmission fluid/torque fluid prematurely breaking down. This could be due to an additive package failing to provide consistent protection in key areas, or perhaps due to condensation build-up. Lower quality oil will have a tendency to break down prematurely and not provide protection. This can affect the yellow metals which help make up the brass pump shoes. When these start to scar, sluggish performance will be noticed from the pump system. In severe cases the shoes underperform so terribly that the pump itself breaks down.

WHAT HAPPENS WHEN OILS OXIDIZE?

Many tractor transmission oils/torque fluids do not have the rust and oxidation inhibitors to sustain the life of the oil and the performance of

the equipment. When the oil degrades it starts to oxidize and sludge begins to form. The sludge will build up in many areas. This sludge is formed when the oil thickens and becomes black and heavy.

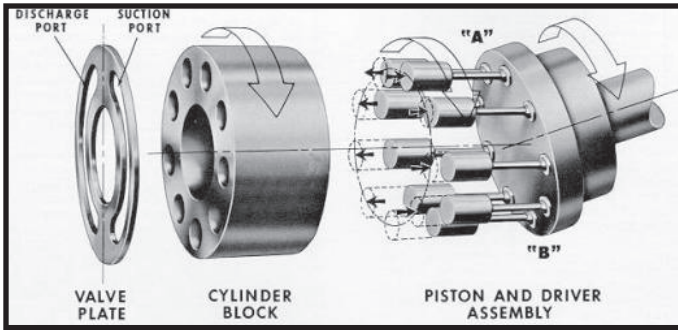
The heavy solids then settle into areas in the pump, around the seals and various other areas throughout the system. In the pump this sludge leads to slow flow of the fluids which in turn leads to cavitations in the response time in the hydraulics. This jerking motion hinders productivity of the equipment.

Around the seals the sludge formation will prevent the seals receiving the lubrication needed to remain soft and pliable. This will lead to leaks, loss of pressure, and contamination.



HOW IMPORTANT IS A DE-FOAMING ADDITIVE?

If a lesser quality oil is not breaking down from lack of rust and oxidation inhibitors, or failing to properly protect against wear, then it typically will run excessively hot during operation. This excess heat is more often than not the result of foam in a hydraulic system. This foam is actually tiny air bubbles. The air bubbles are retaining heat. The excess heat will directly lead to blown hoses and seal degradation.



WITH ALL OF THE “LESSER QUALITY” OILS ON THE MARKET HOW DO YOU KNOW WHICH OIL TO CHOOSE?

Texas Refinery Corp has spent countless hours developing UNIVERSAL TORQUE FLUID and UTF RED to counteract the shortcomings of “industry standard” oils. In fact, these careful developments lead to these products being the first American Made lubricant to gain the “Seal of Authentication” from TractorLife.com.

Through extensive R & D work TRC has formulated UNIVERSAL TORQUE FLUID and UTF RED in a way to extend the life of the oil and provide the highest level of protection possible. This is done with a Rust and Oxidation package that exceeds 8,000 hours in testing. The anti-wear package outperforms the competition hands down. Plus both UNIVERSAL TORQUE FLUID and UTF RED are formulated to include special friction modifiers to further prevent undue wear caused by heat.



The unique blend that makes up UNIVERSAL TORQUE FLUID allows for it to be a multi-viscosity oil that measures as a 10W20. This allows for

a constant film of protection in extreme cold and excessively high temperatures. The performance becomes constant and allows extended operation of equipment without any lag.

While the difference between UNIVERSAL TORQUE FLUID and UTF RED is slight, as both use the same supreme base oils, superior additive package, and provide unmatched performance in equipment that is noticed within a few hours of operation. The main difference is that the UTF RED is red in color, and has a slight tackiness. This tackiness makes this a 10W30 viscosity. However,



Vane Pump damaged by contaminants in fluid.

in the right situation the extra tackiness can provide a layer of lubricity that many times can prevent further damage in a hydraulic system. For example, if this is the fluid of choice in logging equipment and the operator hangs a hose on a limb. Before the equipment is shut down all of the fluid is pumped out of the reservoir. Many times in this situation the pump and other elements would need to be replaced. But with UTF RED the entire hydraulic system is still coated in a layer of lubricity, or film of protection that prevents further damage.



THE CHOICE IS CLEAR...

UNIVERSAL TORQUE FLUID

AND

UTF RED

OUT-PERFORM ALL OTHERS HANDS DOWN!!!