

UNIVERSAL TORQUE FLUID



Texas Refinery Corp of Canada Limited

TractorLife.com Authenticated

Tractors today are more sophisticated, and so are the hydraulics that run them. A tractor or implement is a critical piece of equipment and capital investment. With proper maintenance, the average working life of a farm tractor is typically about 15 years. But, without a quality lubricant in the hydraulic systems, the equipment life will be shortened, downtime can occur and your cost per acre for production will increase.

That's why TractorLife.com has launched a campaign to endorse hydraulic tractor fluids that meet and often exceed OEM credentials, providing optimal protection against wear, rust, oxidation, brake chatter, extreme temperatures and ultimately, premature equipment failure. Texas Refinery's Universal Torque Fluid is the first fluid to proudly display the TractorLife.com Authenticated Mark!



Balanced Anti-Wear to prevent steel on steel while protecting yellow metals

Fifty years ago, your hydraulic system consisted of something to raise and lower the 3-pt hitch and maybe one remote cylinder to raise a plow. Now, you are running sophisticated air planters that have the ability to put down fertilizer at the same time as seed. This is all done through utilizing the tractor hydraulic system, whereas in the past you might have driven those things with a PTO shaft.

Implements are getting larger, so hydraulics are being used not only to raise and fold the unit, but also to steer and brake the unit. Fluid is directed by precise valves that are controlled electronically. Today's electronic controls allow many more types of functions, and the rated flow on some large tractors is now 325 litres per minute with up to nine remote circuits available.

Texas Refinery's Universal Torque Fluid is a high-performance tractor fluid and contains enhanced additive packages to effectively protect gears, clutches and pumps by providing oxidation resistance, anti-wear protection, wear tolerance and enhanced performance in temperature extremes and





harsh conditions. While Texas Refinery is proud to display the TractorLife.com Authenticated Mark, we've taken another big step and formulated more protection chemistry in our product than required . . . to provide your equipment with the best possible protection!

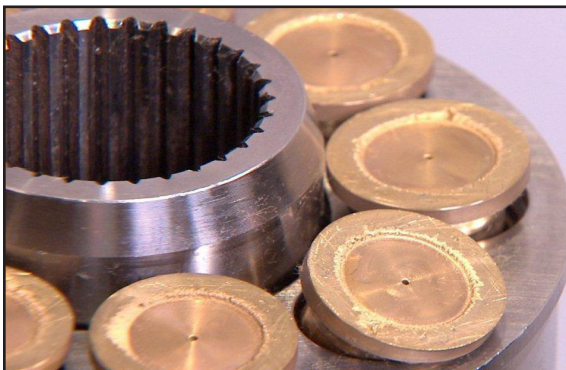
Oxidation causes the formation of sludge deposits in a hydraulic system, which reduces performance and shortens the life of any tractor. Oxidation protection found in Universal Torque Fluid will keep your hydraulic parts cleaner and eliminate sludge. The fluid doesn't have to be replaced as often and you will experience better overall performance, gear protection and reduced brake noise.

The gears, bearings and soft, yellow metals in hydraulic pumps today require the chemistry formulated in Universal Torque Fluid to provide the necessary wear protection. Other hydraulic tractor fluids do not have the load carrying, anti-wear and extreme pressure characteristics – as a result, severe ridging, visible wear and scoring may occur on gear parts.

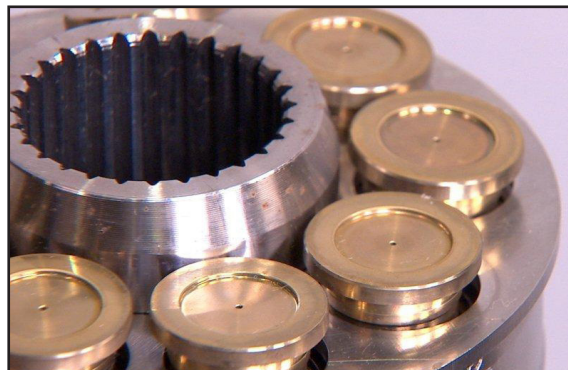


Low quality hydraulic tractor fluids lack the chemistry to protect against the effects of water contamination. Water in the oil creates a corrosive mixture, and the corrosive mixture will then erode the yellow metal on hydraulic pumps, causing deep scratches on the pump's brass piston shoes. Corrosion often leads to sluggish tractor performance and potential hydraulic pump failure. Texas Refinery's Universal Torque Fluid contains additional corrosion additive chemistry to protect the parts from corrosion and erosion, optimizing tractor performance and reliability.

Brake chatter can be annoying for a farmer, and damaging to the tractor if allowed to continue over a long period of time. When braking, a loud squeaking noise can be heard, and the operator may feel vibration. Many users who switch to TRC's Universal Torque Fluid find their brake chatter stops, thanks to the frictional characteristics of the product. Better braking definitely leads to better safety!



Low quality fluid



TRC UTF



UNIVERSAL TORQUE FLUID is a high performance tractor hydraulic fluid formulated to exceed the chemical and physical requirements of the following current specifications and can be used in transmissions, final drives, clutches, wet brakes, and hydraulic systems:

AGCO Powerfluid 821X	Claas/Renault	Massey Ferguson CMS M-1135
AGCO Q-186 (Whitefarm)	Deutz-Fahr	Massey Ferguson CMS M-1141
Allison C-4	Fendt (Non-Vario)	Massey Ferguson CMS M-1143
API GL-4	Ford M2C-86C	Massey Ferguson CMS M-1145
Case MS-1209 (Hy-Trans Ultra Mastertran)	Ford New Holland M2C-134D	Parker-Denison T6H20C
Case MS-1230	Ford New Holland FNHA-2-C-200	Renault Transmissions
Case New Holland MAT 3505	Ford New Holland FNHA -2-C-201	Same Transmissions
Case New Holland MAT 3509	JCB	Volvo VCE WB 101 and 102
Case New Holland MAT 3525	John Deere J20C	Yanmar TF-500
Case New Holland MAT 3526	Komatsu	Zetor OTH
Caterpillar TO-2	Kubota UDT	ZF TE-ML 03E, 05F, 08K, 17E, 21F
	Landini	

Hydraulic Pump Specifications: Denison HF-0, HF-1, HF-2; MAG Cincinnati Machine; Sauer-Danfoss (Sunstrand) Hydrostatic Fluid; Vickers (Eaton) I-286-S, 35VQ25, M-2950-S

SPECIFICATIONS

UNIVERSAL TORQUE FLUID

Product Code #6440 — Cases #6441

APPLICATION: Used in systems having a common oil for Hydraulic Systems, Wet Clutch, Transmission and/or Wet Brakes where squeak or chatter is a problem.

	John Deere J20C Specifications	Universal Torque Fluid
Percent weight of:		
Zinc	--	.20 Minimum
Phosphorous	--	.11 Minimum
Calcium	--	.42 Minimum
Viscosity Index	--	170 Minimum
Kinematic Viscosity, cSt at 40°C	--	55.0
Kinematic Viscosity, cSt at 100°C (212 F) (ISO 3104)	9.1 min.	9.5
Brookfield Viscosity @ -35°C, cSt (ASTM D2983)	<70,000	37,500
Flash Point, °F	392 min.	485
Pour Point, °F	-32	-40
Copper Strip Corrosion	—	1A
John Deere Oxidation Stability Test (JDQ23)		
Viscosity Increase @ 100°C	10% Max	1.3%
Evaporation loss @ 100°C	5 % Max	.9 %
Sludge Formation	None	None
Additive Separation	None	None
John Deere Gear Wear Test (JDQ95)		
Spiral Bevel Rating	Pass	Pass
Sun Pinion Wear	Pass	Passes at <0.018mm
Gear Surface Condition	Pass	Pass
John Deere Transmission Test (JDQ94)		
Total Cycles	2,000	2,000
Initial Coefficient of friction	0.15 max	0.089
Final Coefficient of friction during stalls	0.08 min	0.083
Stall Times	5.00 max	1.82
John Deere Water Sensitivity Test (JDQ19)		
Solids % Volume	0.1 max	0.0
Additive loss, % mass	15% max	0.0
John Deere Rust Protection (JDQ22)		
Rust protection, hours	100	100
FZG Gear Scuff Test	—	10

Handling Information: For safe handling of the product, read the Safety Data Sheet (SDS).



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