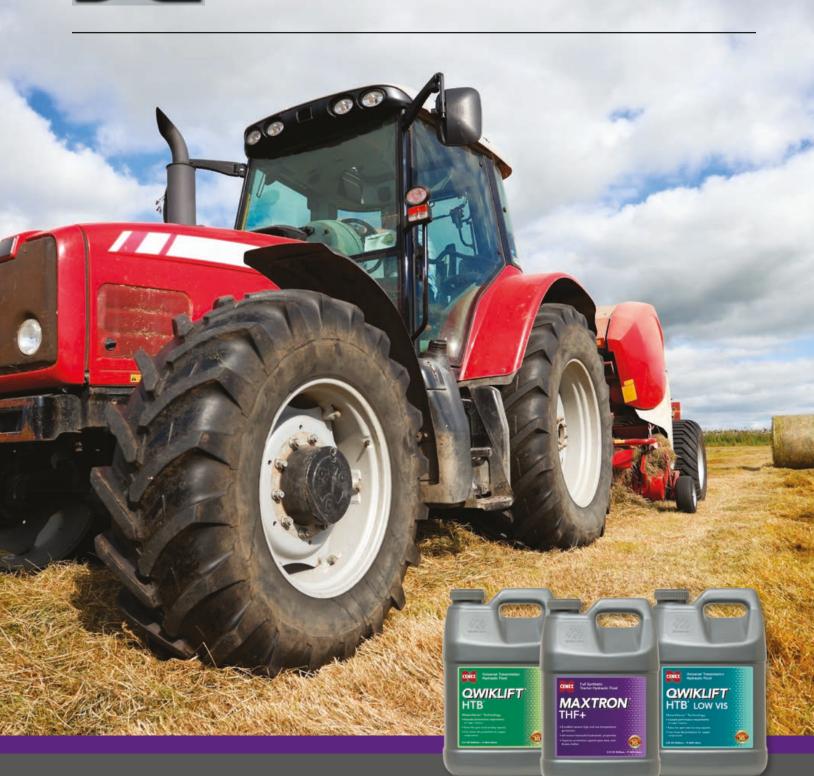
CENEX® TRACTOR HYDRAULIC FLUIDS







PREMIUM TRACTOR HYDRAULIC FLUIDS for Excellent Tractor Protection

Avoid costly downtime with routine hydraulic system maintenance using Maxtron[®] THF+, Qwiklift[®] HTB[®] and Qwiklift[®] HTB[®] Low Vis.

Changing hydraulic fluids in your equipment is an important maintenance procedure that can't be neglected.

Over time, hydraulic fluids lose their effectiveness as antiwear additives are used up. Moisture and dirt buildup can cause corrosion and wear on gears, hydraulic pumps and other moving parts. Overheating the system can damage seals, allow deposits to form, and cause the fluid to break down.

Minimize contamination and overheating by:

- Fixing leaks promptly
- _
 - Checking fluid levels regularly
 - Servicing the hydraulic system as recommended

Why should you change your hydraulic oil?

Changing your hydraulic fluid annually or as recommended by your equipment manufacturer can:

- Reduce the chances of having a hydraulic system failure
- Remove contaminants that may have accumulated during operation
- Increase performance
- Save on repair costs and downtime



Maxtron[®] THF+, Qwiklift[®] HTB[®] and Qwiklift[®] HTB[®] Low Vis hydraulic fluids are specifically formulated for equipment that uses a central system for lubricating the transmission, differential, wet brake, power steering and hydraulic systems.

These fluids are designed to provide superior transmission and hydraulic operations at all temperatures, while keeping the internal parts clean and extending seal life. They can be combined with OEM or other tractor hydraulic fluids in leased, shared, or borrowed equipment.



Qwiklift® HTB® and Qwiklift® HTB® Low Vis are multifunctional universal tractor hydraulic fluids that provide unparalleled wear protection.

Qwiklift® HTB® offers a higher level of protection for hydraulic pumps in agriculture, off-highway, construction and forestry equipment. Made with the finest Group II base oils, additives and formulating techniques, this premium tractor hydraulic fluid (THF) offers critical bronze alloy part protection. Other THFs may not prevent copper corrosion in the pumps, causing loss of critical tolerances, metal fatigue, reduced pump output and hydraulic system failure.

The following parts shown on the right are bronze alloy cylinder sleeves from a Sauer-Danfoss Series 90 axial piston pump. Qwiklift HTB and a leading commercial THF were evaluated* in these pumps, under identical conditions, to measure their copper protection. The cylinder liner run with Qwiklift HTB shows no corrosion, abrasive wear or fatigue failure. This is the protection you want for your equipment. Qwiklift HTB liners are in virtually new condition, while the OEM fluid's liners show extensive corrosion, wear and breakage. The Qwiklift HTB cylinder liners pictured below show the protection you want for your equipment.

In a head-to-head evaluation against a leading OEM brand THF, Qwiklift HTB provided the excellent copper protection that agriculture, construction, and forestry equipment require. During this pump test, the amount of copper (Cu) that accumulated in the drain oil was measured. High copper levels in the oil indicated excessive wear and/or corrosion.

Improved Extreme-Pressure and Antiwear Performance

Qwiklift HTB contains superior antiwear additives that provide excellent protection for increased driveline life. Test results show virtually no pitting on critical gear surfaces with Qwiklift HTB. By comparison gears run on competitive fluids show mild to severe pitting. These benefits of Qwiklift HTB translate into:

- Reduced wear and longer equipment life
- Longer life and less maintenance for bearings and transmission parts
- Greater protection of hydraulic pumps, providing consistent operation



Qwiklift® HTB® protects gears from wear, prolonging driveline life



Gears run on competitive fluid shows wear and pitting damage

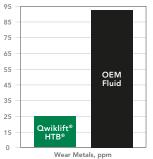
Cylinder liners from these test pumps*



Qwiklift[®] HTB[®] OEM Fluid

*Based on independent research facility testing.

Head-to-head evaluation of copper accumulation



Qwiklift[®] HTB[®] not only completed the 400-hour test, but the amount of copper in the oil was minimal and the pump was still in excellent operating condition. The leading OEM fluid did not complete 400 hours and had four times as much copper in the oil.



Qwiklift [®] HTB [®] Typical Properties	
SAE Viscosity Grade (approx.)	10W-30
API Gravity/Density lbs/gal	29.5/7.32
Flash Point, °C (°F)	220 (428)
Pour Point, °F (°C)	-45 (-49)
Viscosity, cSt @ 100° C	9.5
Viscosity, cSt @ 40° C	61
Viscosity Index	140
Brookfield Viscosity, cP @ -20 °C	4,500
Brookfield Viscosity, cP @ -35 °C	55,000
Foam Test ASTM D892	Pass
DKA Oxidation Test	Pass
Seal Compatibility	Pass
OEM Shear Stability	Pass
API Gear Performance	GL-4
Color	Green

Qwiklift [®] HTB [®] Low Vis Typical Properties	
SAE Viscosity Grade (approx.)	5W-20
API Gravity/Density lbs/gal	31.1/7.25
Flash Point, °C (°F)	176 (350)
Pour Point, °F (°C)	-51 (-60)
Viscosity, cSt @ 100° C	7.2
Viscosity, cSt @ 40° C	34
Viscosity Index	183
Brookfield Viscosity, cP @ -20 °C	1,300
Brookfield Viscosity, cP @ -40°C	18,000
Foam Test ASTM D892	Pass
DKA Oxidation Test	Pass
Seal Compatibility	Pass
OEM Shear Stability	Pass
API Gear Performance	GL-4
Color	Blue

Qwiklift® HTB® is suitable for use in the following applications:

AGCO: Power Fluid 821XL, 821, Case-IH: Hy-Tran® Ultra, Hy-Tran® Plus, Hy-Tran®, MAT-3540, MAT-3505, MS-1210, 1209, 1207, 1206, JIC 144/145, Powergard PTF, Caterpillar: MTO, Deutz/Allis: Power Fluid 821, Fendt CVT: 1000 hour drain (shortened interval, Ford New Holland: Mastertran Ultraction (MAT-3540), M2C-134A,B,C,D, MAT- 3525, M2C-41B, M2C-53A/B, M2C-86B, Hesston/Fiat: Oliofiat Tutela Multi-F, John Deere: Hy-Gard; J20C/A, JD 303, J14C/B, Kubota: Kubota UDT Fluid, Transdraulic Fluid, Massey Ferguson: M-1145, 1143 Permatran III, MF-1127A/B, MF-1129A, Steiger: Hydraulic/Transmission Fluid 17001, Landini: Tractor II Hyd Fluid, Versatile: HyGear Fluid, Specification 23, White/Oliver/MM: AG ONE, Universal Fluid, Type 55, Q-1826 HTF, Zetor: OT-H, GL-4

Qwiklift® HTB® Low Vis is suitable for use in the following applications: **John Deere:** J20D/B, J21A, **Versatile:** Hy-Gear Fluid, Specification 24M



BENEFITS of Qwiklift[®] HTB[®]

- Twice the gear load carrying capability of leading OEM fluids
- Four times the protection of copper components associated with transmission hydraulic systems
- Stops the advance of copper corrosion present in existing tractor/ hydraulic applications

BENEFITS of Qwiklift[®] HTB[®] Low Vis

- Extreme cold temperature startups
- Premium operation in certain hydrostatic drives calling for low viscosity fluid

Improved Performance

- Smoother operation, especially at low temperatures, providing peak operating efficiency even in cold weather
- Smoother, easier shifting over the life of the equipment, resulting in less wear on transmission parts
- Less sludge buildup, providing peak efficiency and longer equipment life
- Reduced varnish on critical parts
- Reduced maintenance for both parts and fluid, resulting in longer equipment life and reduced downtime





Maxtron[®] **THF+** is a full synthetic tractor hydraulic fluid, specifically formulated for extreme weather conditions.

Maxtron[®] THF+ is formulated specifically for tractors which use a centralized system to lubricate the transmission, differential, wet brakes, power steering and hydraulic systems.

The premium synthetic base oils provide excellent cold-flow characteristics while maintaining high temperature viscosity stability. A special additive package is used to provide antiwear and oxidation properties, which enable heavy differential gear loads and resistance to oxidation stress from high temperatures. Maxtron THF+ is formulated to balance friction and provide a smooth operation, while eliminating brake chatter.

The fluid is designed to provide superior transmission and hydraulic operations at all temperatures with a special emphasis on subzero weather conditions, while keeping the internal parts clean and prolonging the life of sealing materials.

Maxtron[®] THF+ Typical Properties

SAE Viscosity Grade (approx.)	5W-30
API Gravity/Density lbs/gal	33.5/7.14
Viscosity, cSt @ 40° C (SSU)	40.8 (191)
Viscosity, cSt @ 100° C (SSU)-	9.7 (58)
Viscosity Index	234
Pour Point, °F (°C)	-54 (-48)
Brookfield Viscosity, cP @ -20 °C	2300
Brookfield Viscosity, cP @ -40 °C	29000
Foam Test ASTM D892	Pass
DKA Oxidation Test	Pass
Seal Compatibility	Pass
OEM Shear Stability	Pass
API Gear Performance	GL-4
Color	Blue

Maxtron® THF+ is suitable for use in the following applications:

AGCO: Power Fluid 821, 821 XL, ALLISON: C-2 (Obsolete), C-3 (Obsolete), and C-4, Case-IH: Hy-Tran[®], Hy-Tran[®] Plus, Hy-Tran[®] Ultra, MAT-3540, MAT-3505, MS-1210, 1209, 1207, 1206, JIC144/145, Power PRF, Caterpillar: MTO, Deutz/Allis: Power Fluid 821, Ford New Holland: Mastertran Ultraction (MAT-3540), M2C-134A,B,C,D, M2C-41B, M2C-53 A,B,M2C-86B, MAT-3525, Hesston/ Fiat: Oliofiat Tutela Multi-F. John Deere: Hy-Gard J20 C/A, JD 303, J14 C/B, Kubota: Kubota UDT Fluid, Transdraulic Fluid, Massey Ferguson: M-1145, 1143, Permatran III, MF-1127A/B, MF1129A, Steiger: Hydraulic/Transmission Fluid 17001, Versatile: HyGear Fluid, Specification 23, White/Oliver/MM: AG ONE, Universal Fluid, Type 55, Q-1826 HTF

FEATURES and **BENEFITS**

Superior performance in these applications:

- All brands of tractors that have a common sump for transmissions, hydraulics, differentials and wet brakes
- High and low temperature operations
- Wear and oxidation control
- Preventing wet brake chatter

Pumping Efficiency: Retains viscosity at high temperatures and minimizes viscosity shear loss which increases hydraulic power output at all operating temperatures.

Low Temperature Performance: Excellent fluidity and superb hydraulic system operation at subzero temperatures.

Chatter Free: Outstanding frictional properties which reduce annoyance and damage caused by wet brake chatter.

Wear Protection: Protects gears, pumps and other parts from wear due to high loads, therefore extending equipment life.

Compatibility: Prolongs life of oil seals and hydraulic hoses, reducing downtime.

System Cleanliness: Keeps all system parts clean and varnish free for smooth operation.

Oil Durability: Superior oxidation control reduces oil degradation from high operating temperatures providing longer oil life.



A PROTECTION PLAN Like No Other

Protecting your equipment inside and out with the Cenex Total Protection Plan[®].

Farmers, you know how important machinery and equipment is to your overall success. That is why many farmers enroll in the Cenex Total Protection Plan[®], a warranty program that has you covered when the unexpected happens. With the Total Protection Plan, CHS will pay for costs, including installation and labor, to repair or replace parts that fail during normal use, as long as you use Cenex[®] lubricants exclusively. For only \$299 for new equipment and \$399 for used, you can protect your equipment from downtime.

Visit <u>Cenex.com/TPP</u> for more information, or contact your Cenex Lubricants Representative.



66 This program is great for peace of mind. I enrolled my used tractor, submitted the oil samples as required, made one call, and the claim was covered. 99

- Brian Jaeger, Mapleton, Minn.



