



GETTING TO KNOW HYDRAULICS

HYDRAULIC OILS

- ▶ **R&O** – Stand for Rust & Oxidation; also contains AntiFoam additives.
 - R&O is approximately a 10 weight oil with the additives
 - Suitable for use in applications where a premium R&O product is not required.

- ▶ **AW** – Stand for Anti-Wear; also protects against Rust & Oxidation, and contains AntiFoam additives.
 - AW32 is approximately a 10 weight oil with the additives
 - AW46 is approximately a 15 weight oil with the additives
 - AW68 is approximately a 20 weight oil with the additives
 - AW –provides many of the advantages of premium hydraulic oil at a moderate price. Suitable for use in applications where a Premium AW product is not required.

All are blended with highly refined naphthenic/paraffinic base oils.

FREQUENTLY ASKED QUESTIONS

- ▶ **Q) What is the difference between AW32, AW46, and AW68 Hydraulic Oils?**
 - A) The weights (10, 15 & 20) Sometimes called (ISO32, ISO46, ISO68)

- ▶ **Q) What is the difference between Premium AW32 and Quality AW32?**
 - A) Quality AW32 is approximately a 1500-hour oil, whereas, Premium AW32 has increased oxidation stabilizers making it approximately a 5000-hour oil.

ECONOMY TRACTOR HYDRAULIC FLUID

- ▶ **TRACTOR HDYRAULIC 303** – Gives excellent results in the areas of brake squawk, PTO clutch performance, rust protection, water sensitivity, extreme pressure/anti-wear properties and foam suppression.
 - ▶ Blended from quality virgin base oils, w/high-performance additives.
 - ▶ Approximately a 20 weight with the additives
 - ▶ Sometimes called '303'.

- ▶ Suitable for older tractors, or where a ‘price’ fluid is desired.
- ▶ Recommended as a replacement for the following manufacturers where a tractor hydraulic fluid is recommended:

▶ Allis Chalmers	J.I Case/David
▶ Ford Tractor	Oliver
▶ International Harvester	Allison
▶ John Deere 303	Caterpillar
▶ White	Deutz
▶ Massey Ferguson	

PREMIUM TRACTOR HYDRAULIC FLUID

- ▶ **PREMIUM TRACTOR FLUID** – Gives excellent results in the areas of transmission lubrication, differential and final drive gears. Serves as a hydraulic medium, power steering fluid, power brake and power take-off fluid in farm tractors.
 - ▶ Blended from highly refined base oils, w/superior additives.
 - ▶ **Approximately a 10W-20 weight with the additives**
 - ▶ Sometimes called ‘J20C’.
 - ▶ Recommended for most newer tractors, however can be used for older models; also safe to use - if unsure which fluid to use. Meets the requirements of the following manufacturers’ specified products:

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|---|--------------------------------|
| ▶ Allis Chalmers PF-821 XL | Caterpillar TO2 |
| ▶ Sunstrand HMS-103 | Oliver Type 55 |
| ▶ IH Hy-Tran, Spec. B-6 | Vickers |
| ▶ Allison C-3, C4 | Kubota UDT |
| ▶ Deutz HTF PF821XL | White Q1722, Q1826 |
| ▶ Versatile Gear/Hyd. Trans. Fluid | Steiger Hydraulic Trans. Fluid |
| ▶ Ford Tractor M2C14B, M2C48B, M2C134B, M2C134C, M2C134D, M2C159B1, M2C159B2 | |
| ▶ J.I Case/David Brown J1C-143, 144, 145, 185, MS-1204 | |
| ▶ Massey Ferguson M-1110, M-1127A, M-1127-B, M1129-A, (Permatran II), M-1141 (Permatran | |
| ▶ John Deere J20C, Quatrol, J20A (Hygrad 303), J14B, J14C, J21A, 303 | |

FREQUENTLY ASKED QUESTIONS

- ▶ **Q) What is the difference between 303 Tractor Fluid and Premium Tractor Fluid?**
f A: The 303 Tractor Fluid is for older tractors, out of warranty, or where the owner wants a lower cost tractor fluid. The Premium Tractor Fluid meets the more recent requirements of tractor manufacturers.
 - ▶ Note: Premium Tractor Fluid can be used in older tractors, but, the 303 Tractor Fluids should not be used in newer tractors, as it may void warranty.
- ▶ **Q) What is the difference between the names: Hydraulic Oil and Hydraulic Fluid?**
f A: No difference – just terminology.
 - f* Hydraulic Fluids work on straight hydraulic systems, such as: Backhoes, hydraulic jacks, hydraulic vane & gear pumps, and hydraulic reservoirs.
 - f* Tractor Fluids function as: a transmission fluid, wet brake fluid, power steering fluid, and, hydraulic oil for the power take off.