



## Synthetic Tractor Hydraulic/ Transmission Oil

### An SAE 5W-30 Fluid Formulated for All-Weather Performance in Farm and Commercial Equipment

AMSOIL Synthetic Tractor Hydraulic/Transmission Oil is an all-weather Universal Tractor Transmission Oil (UTTO) engineered to meet the tough demands of heavy-duty, hydraulic-powered farm and commercial equipment. Its unique formulation of synthetic base stocks and additives effectively reduces wear, resists heat, protects against rust and extends fluid and equipment service life. Synthetic Tractor Hydraulic/Transmission Oil is recommended for extended oil drains based on oil analysis.

#### Excellent Protection in Temperature Extremes

AMSOIL Synthetic Tractor Hydraulic/Transmission Oil operates over a wide range of temperatures. It has a high viscosity index to maintain its lubricity for wear protection at high operating temperatures, and it flows at temperatures down to -58°F (-50°C) for improved equipment operation at low temperatures. Synthetic Tractor Hydraulic/Transmission Oil exceeds the viscosity requirements of the all-weather specifications of both Case New Holland 3525 and 3526 (formerly Ford New Holland FNHA-2-C-200 & 2-C-201) and John Deere J20C & J20D, helping eliminate the need for seasonal oil changes.

#### Smooth Brake Operation

AMSOIL Synthetic Tractor Hydraulic/Transmission Oil is formulated with durable friction-modifier additives that effectively suppress wet-brake chatter. Unlike lower-quality oils that can break down and cause vibration, AMSOIL Synthetic Tractor Hydraulic/Transmission Oil provides continuous frictional stability for long-term smooth brake operation.

**Feature: Multi-Viscosity**

- Benefits:**
- Excellent hot- and cold-weather protection
  - Reduces need for seasonal change outs

**Feature: Universal Applications**

- Benefits:**
- Inventory consolidation
  - No misapplications

**Feature: Stable Friction-Modifier Additives**

- Benefits:**
- Correct and decisive multi-disc/clutch operation
  - Controls brake chatter
  - Smooth operation
  - Extended oil and equipment life

**Feature: Anti-Foam Additives**

- Benefits:**
- Rapid air release
  - Cooler operation
  - Smooth brake operation
  - Control over fade and spongy hydraulic response

**Feature: Oxidation Inhibitors**

- Benefits:**
- Excellent resistance to oil degradation at high temps
  - Extended lubricant and equipment life

**Feature: Seal and Hose Conditioners**

- Benefits:**
- Compatible with all seal materials
  - Seal and hose flexibility
  - Positive seal seating
  - Reduced oil leaking
  - Extended seal and hose life
  - Fewer blown hoses

**Feature: Superior Anti-Wear Additives**

- Benefits:**
- Scoring & gear wear protection under all load conditions
  - Extended equipment life, even in severe conditions
  - Increased pump and valve life
  - May be used in final drives calling for a UTTO



## TYPICAL TECHNICAL PROPERTIES

### Synthetic Tractor Hydraulic/Transmission Oil (ATH)

SAE Viscosity .....	5W-30
Kinematic Viscosity @ 100°C, cSt (ASTM D 445) .....	9.8
Kinematic Viscosity @ 40°C, cSt (ASTM D 445) .....	53.7
Viscosity Index (ASTM D 2270) .....	170
Flash Point °C (°F) (ASTM D 92) .....	242 (468)
Fire Point °C (°F) (ASTM D 92) .....	260 (500)
Pour Point °C (°F) (ASTM D 97) .....	-50 (-58)
Four-Ball Wear Test (ASTM D 4172 @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm .....	0.37
Cold-Crank Simulator -30°C (ASTM D 5293) .....	5207
Brookfield Viscosity @ -40°C (ASTM D 2983) .....	19243

## APPLICATIONS

AMSOIL Synthetic Tractor Hydraulic/Transmission Oil is recommended for equipment combinations of transmissions, hydraulic systems, final drives, power take-off systems and wet brakes operating in “all-weather” hot and cold temperatures, including, but not limited to, those listed below. Consult your owner’s manual for specific application requirements:

- Farm tractors and equipment
- Fork lift trucks
- Off-road equipment
- Lawn tractor hydrostatic transmissions
- Golf course mower hydrostatic systems
- Some 4x4 ATV models with wet-brake differentials

## SPECIFICATIONS

AMSOIL Hydraulic/Transmission Oil is recommended for transmission and hydraulic applications that require any of the listed specifications. Consult your owner’s manual for specific application requirements.

- **ABEX/Dennison** – Hyd. Fluid HF-0 All pumps, HF-2, HF-1
- **AGCO/Duetz-Allis/Allis-Chalmers** – Power Fluid 821 XL272843, 257541, 246634
- **AGCO White Farm (Oliver)** – Q-1826, Q-1802, Q-1766B, Q-1722, Q-1705, Type 55
- **Allison** – C-4, C-3, C-2
- **API GL-4**
- **Case New Holland (CNH)** – MAT 3505 (MS 1209), MS-1207 (Hy-Tran® Plus), 3506 (MS 1210) (TCH Fluid JIC145), 3509 (MS 1230, M2C48-C) Poclain Equip. high-pressure systems, 3525 (FNHA-2-C-201.00, M2C134D), 3526 (FNHA-2-C 200.00 winter grade), 3510 (MS-1317, GL-4), B-6, MS-1206 (PTF), MS-1205 (TFD-II), MS-1204 (TFD), JIC-185, JIC-144, JIC-143, B-5, M2C86-B & C, M2C53-A, M2C41-B

- **Caterpillar** – TO-2
- **Clark** – TA 12, TA 18, HR 500, HR 600
- **Dresser CED** – Trans/Hyd Fluid
- **Deutz Fahr**
- **Fendt (Non-Vario)**
- **Ford** – ESN M2C86B, M2C86C, Fiat requiring M2C134-D FNHA-2-C-201.00
- **Hesston Fiat** – Oilofiat Tutela Multi-F, AF-87
- **John Deere** – J20C, J20D (winter grade), J20A/B, J14B, JD 303, J21A
- **Komatsu**
- **Kubota** – UDT
- **Landini** – Tractor II Hyd. Fluid
- **Massey-Ferguson** – M-1141 (Permatran® 821 XL, Formerly Permatran III), M-1135, M1143, M1145, M1129-A, M-1127-A/B, M-1110
- **Renault** – Renault Transmissions
- **Steiger** – Hyd/Trans SEMS 17001
- **Sundstrand** – Hydrostatic Transmission Fluid
- **VCE** – WB-101
- **Versatile** – Recommended for use in Valmet, Yanmar, New Idea Power Units, Leyland, Belarus, Spec 24M, Spec 23M
- **ZF** – TE-ML 03E, 05F, 06K, 17E

## INSTALLATION

AMSOIL Hydraulic/Transmission Oil is fully compatible with conventional tractor hydraulic/transmission oils. To install AMSOIL Hydraulic/Transmission Oil in a hydraulic system, drain the existing hydraulic/transmission oil, change filters and install AMSOIL Synthetic Tractor Hydraulic/Transmission Oil.



AMSOIL products and Dealership information are available from your local AMSOIL Dealer.