

CHAMPION BRANDS 1001 GOLDEN DRIVE CLINTON, MO 64735 1-800-821-5693 www.championbrands.com www.championsusechampion.com

## TECHNICAL BULLETIN: JN0100 SUBJECT: TRACTOR FLUIDS

## DATE: 7-13-12 AUTHOR: JAKE NEUBAUER

## UNDERSTANDING TRACTOR FLUIDS

The phrases Universal Tractor Transmission Oil (UTTO) and Tractor Hydraulic Fluid (THF) have an understandably agricultural connotation. However, these fluids are also commonly used in many types of mobile equipment including excavators and loaders. Despite the "universal" nature of most of these fluids, they are not simple products and the marketplace is littered with underperforming oils.

UTTO fluids have a unique set of responsibilities in machinery; they protect transmission gears from wear, they protect hydraulic pumps from wear, they protect clutch materials and provide frictional performance that must both provide smooth clutch engagement and sufficient friction for wet brakes to work properly. They must also keep parts clean, minimize foaming, prevent corrosion and resist oxidation. Because there are no governing bodies over UTTO specifications these fluids are "self-certifying", meaning that the oil marketer is responsible for ensuring the fluids meet specifications. In practice, some fluids are marketed to mislead the consumer by claiming conformance to obsolete specifications. Or the fluids may not meet their stated claims at all, and could cause damage to equipment. Some fluids marketed as UTTO may be made with inferior base oils, may not have the accepted additive treat, or may even be entirely line flush.

When selecting a UTTO fluid, look for a quality product from a trusted brand like Champion® 4000 hydraulic/transmission oil. Using quality fluid and adopting good maintenance practices will provide longer equipment life, less downtime, and better reliability for the mobile equipment that your business relies on.

