

University of Nebraska
Department of Biological Systems Engineering
Nebraska Tractor Test Laboratory

DETERMINATION OF FUEL TEMPERATURE USED DURING TESTING

This Board Action defines the method to be used for determining the fuel temperature to be used during tractor testing. It has been developed to provide a fuel temperature most representative of actual use. This test may be conducted by the manufacturer with the consent of the Nebraska Tractor Test Lab.

1. The tractor shall be prepared by installing a thermocouple as close to the pump inlet as possible without affecting the fuel flow. The fuel return temperature may also be monitored.
2. The tractor fuel tank shall be filled to half capacity plus the amount of fuel estimated to be used during two hours of operation at maximum power at rated engine speed.
3. The tractor shall be started, warmed up and run for two hours at maximum available power at rated engine speed. The fuel temperature shall be monitored during this time. The ambient temperature during this procedure shall be 75°F ±5° F.
4. The fuel temperature selected for all PTO and Drawbar tests shall be the fuel temperature measured at the end of this two hour period with a tolerance of ±5° F.

May 29, 2007 (Draft Proposed)
November 7, 2007

Board of Tractor Test Engineers

Michael F. Koerber
Chair

Viacheslav I. Adamchuk
Member

John A. Sudd
Member