

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

REQUIRED TRACTOR POWER SPECIFICATIONS

Rationale:

Section 2-2703 of the Nebraska Tractor Engine Testing Law requires the Nebraska Tractor Test Board of Engineers to compare the results of a tractor test with the manufacturer's representations as to power, fuel and other ratings of the tractor model prior to recommendation that a permanent sales permit be allowed. As one of the primary interests of the Nebraska Tractor Test Lab is reporting tractor power available for customer use, the goal is to measure power at the PTO or drawbar.

Procedure:

If a manufacturer wishes to obtain either a temporary or permanent sales permit for a tractor model, the application for the sales permit must be accompanied by general advertising literature.

-If the standard version of the tractor model includes a power-take-off (PTO), a PTO power claim must be included in the sales literature or the operator's manual.

-If the standard version of a 4-wheel drive tractor model does not include a power-take-off (PTO) and no drawbar power claim is made, the engine power claim will be considered met if the engine power claimed is less than or equal to: $1.150 * (\text{maximum drawbar power at rated engine speed}) + 43.4 \text{ hp (or } 32.4 \text{ kW)}$.

-If the standard version of a rubber-tracked tractor (includes 4-track drive) model does not include a power-take-off (PTO) and no drawbar power claim is made, the engine power claim will be considered met if the engine power claimed is less than or equal to: $1.273 * (\text{maximum drawbar power at rated engine speed}) + 46.7 \text{ hp (or } 34.8 \text{ kW)}$.

November 7, 2007
November 11, 2010 (Revised)

Board of Tractor Test Engineers

Michael J. Koehn
Chair

Deepak R. Keshwal
Member

John A. Lund
Member