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

## REOUIRED TRACTOR POWER SPECIFICATIONS

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## 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 a rubber-tracked tractor (includes 4-track drive) model does not include a power-take-off (PTO), or includes a power-take off but no PTO power claim is made, or includes a PTO that is not capable of transmitting the full engine power, 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: 1.264 \* (maximum drawbar power, unballasted, at rated engine speed) + 44.03 hp (or 32.83 kW).
- If the standard version of a 4-wheel drive tractor model does not include a power-take-off (PTO), or includes a power-take off but no PTO power claim is made, or includes a PTO that is not capable of transmitting the full engine power, 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: 1.194\*(maximum drawbar power, unballasted, at rated engine speed) + 42.99 hp (or 32.06 kW).
- If the standard version of a Front Wheel Assist tractor model does not include a power-take-off (PTO), or includes a power-take off but no PTO power claim is made, or includes a PTO that is not capable of transmitting the full engine power, 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: 1.318\*(maximum drawbar power, unballasted, at rated engine speed) + 28.56 hp (or 21.30 kW).

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November 7, 2007

November 11, 2010 (Revised)

November 21, 2013 (Revised)

September 18, 2017 (Revised)

June 8, 2021 (Revised)

**Board of Tractor Test Engineers** 

Member

Chair