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2000-RPM Front and Mid PTO for Lawn and Garden Ride-on Tractors



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Developed by the ASAE Small Tractor and Power Equipment Committee; approved by the Power and Machinery Division Standards Committee; adopted by ASAE September 1989; revised editorially March 1993; reaffirmed December 1994, December 1999, January 2001; revised August 2001; reaffirmed February 2006; periodic review extended 2 years December 2010; revised February 2011; revised June 2014.

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1 Purpose and Scope

1.1 This Standard is intended to standardize front and mid power take-off shafts on lawn and garden ride-on tractors and the mating attachment connector with respect to control, speed and direction of rotation.

1.2 This Standard does not address geometry or shielding of the attachment driveline.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies unless noted. For undated references, the latest approved edition of the referenced document (including any amendments) applies.

ANSI/OPEI B71.1, American National Standard for Consumer Turf Care Equipment — Pedestrian-Controlled Mowers and Ride-On Mowers — Safety Specifications

ANSI/OPEI B71.4, American National Standard for Commercial Turf Care Equipment — Safety Specifications

3 Specifications

3.1 When operating at maximum design power, shaft rotation shall be 2000 rpm $\pm$ 50 rpm. Tractors shall be equipped with a means to prevent the operator from inadvertently operating the PTO in excess of 2300 rpm under no load conditions.

3.2 The direction of rotation shall be clockwise when facing in the direction of forward travel.

3.3 Tractors shall be equipped with an independent PTO clutch or a means to prevent propelling of the tractor through the PTO.

3.4 The front and mid PTO shall be interlocked to prevent the engine from being started by conventional means unless the attachment drives are disengaged or in neutral.

3.5 The power take-off shaft and connector for the attachment driveline shall have the spline dimensions shown in Table 1. Dimensions required for the shaft and the connector retaining means are shown in Figure 1.