ANSI/ASABE S604.3 OCT2020
Safety for Power Take-off (PTO), PTO Drive Shafts, and Power Input Connection (PIC) for Agricultural Field Equipment

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Approved by the ASABE Tractor Implement Interface/PTO subcommittee. Section 10 of ANSI/ASAE S318.16 was removed to become a stand-alone standard for eventual alignment with ISO 5673. Approved June 2009; revised October 2014, October 2018, October 2020.

Keywords: Definitions, Drive shaft, Guarding, Manuals, Power take-off, Safety, Safety signs, Shielding, Transport

1 Scope

1.1 This standard is a guide to provide a reasonable degree of personal safety for operators and other persons during normal operation and servicing of the power take-off (PTO) drive shafts of a tractor or self-propelled machine used in agriculture and the power input connection (PIC) of its implement, in addition to what is given in ANSI/ASABE AD5673-1:2005. It is applicable only to those PTO drive shafts and guards mechanically linked to the shaft by at least two bearings.

1.2 It is not applicable to PTO drive shafts guarded by location or to the mechanical characteristics of overrun devices and torque limiters, nor are environmental aspects considered; neither is it applicable to PTO drive shafts and their guards manufactured before the date of its publication, neither is it applicable to service parts for agricultural equipment for field or stationary operation manufactured before the date of this publication.

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/ASAE S390 (ISO 12934:2013), Tractors and machinery for agriculture and forestry — Basic types — Vocabulary

ANSI/ASABE AD500-1:2014, Agricultural tractors — Rear-mounted power take-off types 1, 2, 3 and 4 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone

ANSI/ASABE AD500-2:2004, Agricultural tractors — Rear-mounted power take-off types 1, 2, 3 and 4 — Part 2: Narrow-track tractors, dimensions for master shield and clearance zone

ANSI/ASABE AD5673-1:2005, Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 1: General manufacturing and safety requirements

ANSI/ASABE AD5674:2004, Tractors and machinery for agricultural and forestry — Guards for power take-off (PTO) drive shafts — Strength and wear tests and acceptance criteria

ANSI/ASABE AD8759-1:2018, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off: Safety requirements and clearance-zone around PTO

ANSI/ASABE AD11684:1995, Tractors, machinery for agricultural and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles

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