



SURFACE VEHICLE RECOMMENDED PRACTICE

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Three-Point Hitch (Type A) Backhoe Personnel Protection

RATIONALE

The technical report covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

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1. SCOPE

This SAE Recommended Practice applies to three-point hitch (Type A) backhoes as defined in SAE J326 when mounted on either an agricultural tractor as defined in ANSI/SAE S390 or other off-road self-propelled work machine as defined in SAE J1116. This criterion is intended for the manufacturer of the backhoe, whether or not the backhoe is manufactured or marketed by the same company that manufactures or markets the propelling machine.

1.1 Purpose

This SAE Recommended Practice establishes minimum performance criteria for operator and bystander protection from machinery hazards for three-point hitch (Type A) general purpose backhoes which are within the scope of this document.

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated, the latest revision of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J49 Specifications Definitions - Hydraulic Backhoes

SAE J115 Safety Signs

SAE J185 Access Systems for Off-Road Machines

SAE J326	Nomenclature - Hydraulic Backhoes
SAE J517	Hydraulic Hose
SAE J899	Operator's Seat Dimensions for Off-Road Self-Propelled Work Machines
SAE J920	Technical Publications for Off-Road Work Machines
SAE J1116	Categories of Off-Road Self-Propelled Work Machines

2.1.2 ISO Publications

Available from ANSI, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ISO 3411:2007	Earth-moving machinery - Human physical dimensions of operators and minimum operator space envelope
ISO 3457	Earth-moving machinery - Guards - Definitions and requirements
ISO 5353	Earth-moving machinery, and tractors and machinery for agriculture and forestry - Seat index point

2.1.3 ASABE Publications

Available from the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659, Tel: 269-428-6324, www.asabe.org.

ASAE S203.14	Front and Rear Power Take-Off for Agricultural Tractors
ASAE S217.12	Three-Point Free-Link Hitch Attachment of Implements to Agricultural Wheel Tractors
ASAE S277.2	Mounting Brackets and Socket for Warning Lamp and Slow-Moving Vehicle (SMV) Identification Emblem.
ASAE S278.7	Agricultural wheeled tractors and implements - Three-point hitch couplers - Part 1: U-frame coupler
ASAE S390	Definitions and Classifications of Agricultural Field Equipment

3. DEFINITIONS

3.1 Backhoe Components

See SAE J326.

3.2 Functional Component

A working mechanism of an attachment or implement designed to perform a specific task such as the bucket of a backhoe.

3.3 Inadvertent Contact

Contact between a person and machinery hazard, or other type of hazard, resulting from the person's unplanned action during normal operation or servicing.