



SURFACE VEHICLE INFORMATION REPORT



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(R) Fire Prevention on Forestry Machinery

RATIONALE

This Information Report is published in order to document practices, procedures and technology intended to guide standard engineering practice and machinery operating procedures. Some content may be of a general nature or may not yet be broadly accepted. This document is not intended to provide requirements or benchmarks against which a product or practice can be evaluated.

FOREWORD

This document is an Information Report.

Forestry machinery operates in an organic material environment that commonly contains large quantities of combustible fuel in the form of wood dust, chips, and debris. In addition, elements of the machine such as fuel, hydraulic oil, tires, paint and plastics are ignitable. Forestry machinery is normally powered by an internal combustion engine and utilizes moving machinery components and electrical devices that are potential ignition sources. The machines are operated and maintained by people who have diverse knowledge, skills, policies, practices and awareness about fire prevention and safety. This combination of factors gives rise to a fire hazard level in the forestry industry that is generally acknowledged to be high. Some of these factors are influenced by design, manufacturing, service, maintenance, operation, training and job site management.

This document provides fire prevention information useful for the forestry machinery manufacturer and for the forestry machine user. Not all information applies to all machines. Adherence to the methods and recommendations of this report is not a guarantee of fire prevention.

Relationship of SAE Standard to ISO Standard: ISO 11850, "Machinery for forestry—Self-propelled machinery—Safety requirements" contains a section on fire safety.

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TABLE OF CONTENTS

1.	SCOPE.....	2
1.1	Purpose.....	2
2.	REFERENCES.....	2
2.1	Applicable Publications.....	2
2.1.1	SAE Publications.....	3
2.1.2	ISO Publications.....	3
2.1.3	NFPA Publications.....	3
2.1.4	UL Publications.....	3
3.	DEFINITIONS.....	4
3.1	Fire Fuel.....	4
3.2	Fire Risk Area.....	4
3.3	Hydraulic Fluid.....	4
3.4	Ignition Source.....	4
3.5	Wiring.....	4
4.	MACHINERY DESIGN.....	4
4.1	Risk Analysis.....	4
4.2	Ignition Sources.....	4
4.3	Fire Fuel Materials.....	5
4.4	Fire Safety.....	6
5.	MACHINE OPERATION AND MAINTENANCE.....	6
5.1	Training.....	6
5.2	Operating.....	7
5.3	Fuel Handling.....	7
5.4	Maintenance.....	8
6.	NOTES.....	8
6.1	Marginal Indicia.....	8

1. SCOPE

This document applies to off-road forestry work machines defined in SAE J1116 or ISO 6814.

1.1 Purpose

This document identifies major relevant factors and advises on actions that can be considered in minimizing the risk of fire on a forestry machine. This document is intended as a guide and is subject to change to keep pace with experience and technical advances.

2. REFERENCES

2.1 Applicable Publications

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

2.1.1 SAE Publications

Available from SAE International, 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 J30	Fuel and Oil Hoses
SAE J115	Safety Signs
SAE J153	Operator Precautions
SAE J517	Hydraulic Hose
SAE J930	Storage Batteries for Off-Road Work Machines
SAE J1116	Categories of Off-Road Self-Propelled Work Machines
SAE J1942	Hose and Hose Assemblies for Marine Applications
SAE J1942/1	Qualified Hoses for Marine Applications

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 3600:1996	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment—Operator's manuals—Content and presentation
ISO 3795:1989	Road vehicles, and tractors and machinery for agriculture and forestry—Determination of burning behaviour of interior materials
ISO 6814:2000	Machinery for forestry—Mobile and self-propelled machinery—Terms, definitions and classifications
ISO 9244:1995	Earth-moving machinery—Safety signs and hazard pictorials—General principles
ISO 11684:1995	Tractors, machinery for agriculture and forestry, powered lawn and garden equipment—Safety signs and hazard pictorials—General principles
ISO 11850:2003	Machinery for forestry—Self-propelled machinery—Safety requirements
ISO 21507:2005	Earth-moving machinery—Performance requirements for non-metallic fuel tanks

2.1.3 NFPA Publications

Available from National Fire Protection Agency, 1 Batterymarch Park, Quincy, MA 02169-7471, Tel: 617-770-3000, www.nfpa.org.

NFPA 10	Standard for Portable Fire Extinguishers, 2002 Edition
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2.1.4 UL Publications

Available from Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096, Tel: 847-272-8800, www.ul.com.

UL 711	Rating and Fire Testing of Fire Extinguishers, seventh edition, 2004
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