

1070D Harvester Serial Number WH1070D000352-

OPERATOR'S MANUAL 1070D Harvester OMF064366 (ENGLISH)

CALIFORNIA
Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

 **WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

**Worldwide Construction
And Forestry Division**

LITHO IN FINLAND, REV 310303

Introduction

Introduction

The information contained in this manual is comprised of instructions which will assist the operator to operate the machine in a safe and efficient manner. Make sure this manual is always close at hand and available to all who work on the machine. Should this manual be lost or should it deteriorate to an unintelligible state, contact Timberjack or your nearest Timberjack dealer for a replacement manual.

If you sell the machine, be sure to give this manual to the new owners.

Continuing product improvement made by Timberjack may result in changes to the machine which are not covered in this manual. Should you need up-to-date information about your machine or should you have questions in regards to this manual, please contact Timberjack or your Timberjack dealer.



CAUTION: Only persons whose training has been approved by Timberjack are permitted to operate Timberjack machinery.

Improper operation and maintenance of this machine can be hazardous and could result in serious injury or death.

Therefore, it is of paramount importance that all the instructions given in this manual and during training be followed when the machine is operated or serviced.

This instruction manual describes the operation of your **Timberjack 1070D** single grip harvester.

Only operators and service personnel who have completed and passed Timberjack's course for the 1070D may use the machine.

Furthermore, the operator must have studied and understood the entire manual.

The manual provides you with information about the machine's design and function, which is necessary in order to use and look after the machine in the proper manner. It also serves to offer guidance during maintenance and certain adjustment work.

Please contact your nearest authorized service workshop for more complicated maintenance and repair work. Our service personnel have the training and special tools that are required for such tasks.

AK12300,0000030 -19-10OCT01-1/1

Timberjack 1070D Harvester

Timberjack 1070D harvester is intended for felling, delimiting and crosscutting trees. The machine must not be used for any other purposes.

We designed the Timberjack 1070D harvester to operate under difficult off-road circumstances. Still it is important that you always adapt your driving speed to the surroundings. Use chains if necessary.

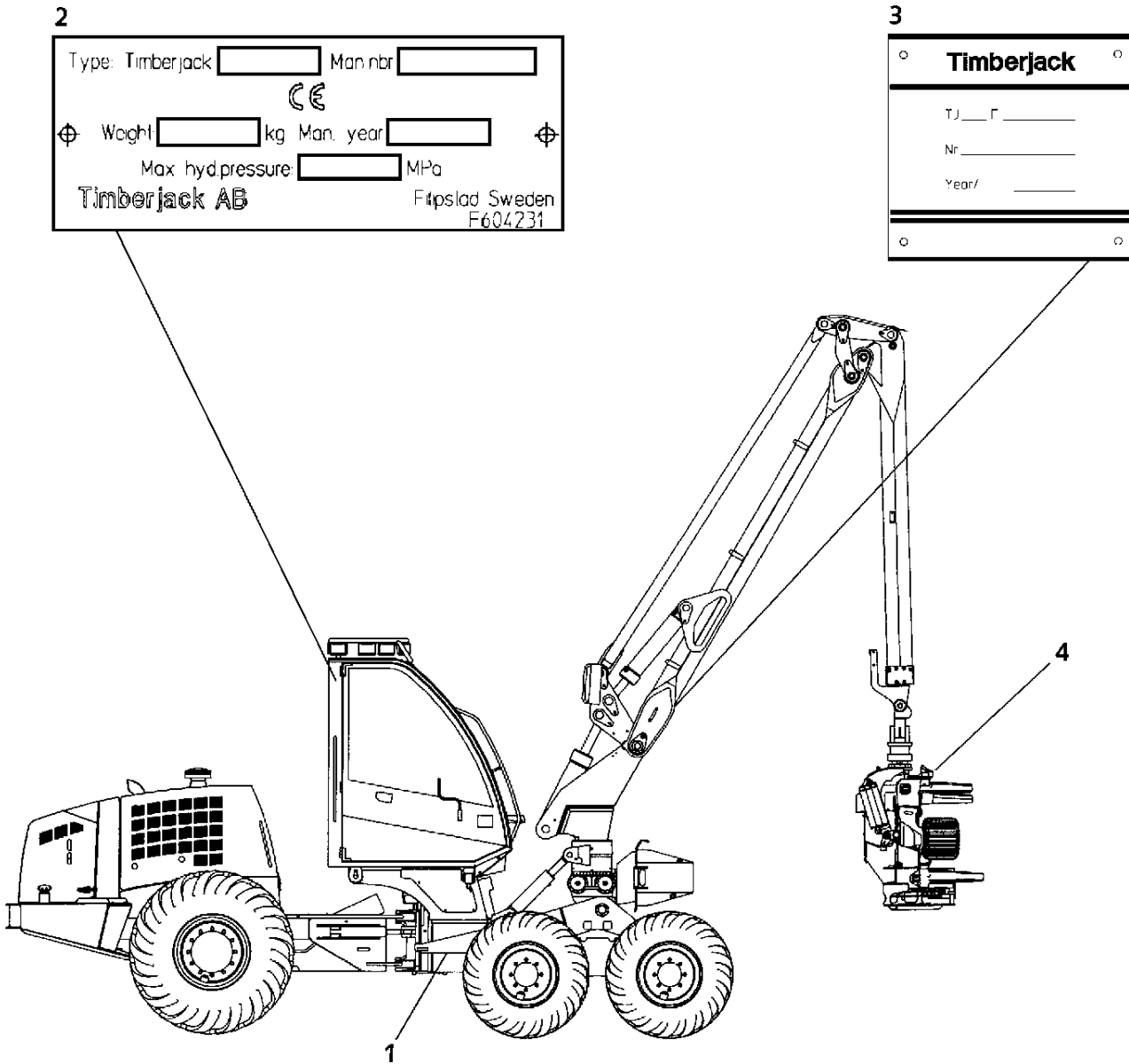
Regular servicing and proper operation is of vital significance for long service life of the machine. The instructions contained in this manual should therefore be adhered to.

Experience shows that a thorough check of the machine at regular intervals is a guarantee for favourable cost efficiency.

Do not pollute the environment. It is imperative that you do not allow oil to leak into the ground or water because it only takes one liter of mineral oil to contaminate one million liters of water. Should you see a leaky joint, fix it immediately.

Remember fire prevention. Keep the machine clean at all times for this reduces the risk of overheating and chance of a fire starting. Have the fire extinguishers checked regularly.

Location of Rating Plates and Serial Numbers



1. Punched serial number is located on right side of the frame.
2. Rating plate inside the cabin on right rear cab pillar.

3. Serial number for the boom.
4. Serial number for the harvester head.

Warranty

Timberjack provides a warranty for the machine in accordance with the standard conditions of the Timberjack Group.

The following prerequisites apply in relation to our responsibility for machines that are made by us:

- The machine is exclusively operated and maintained by experienced personnel who have been trained by Timberjack or by a dealer authorized by Timberjack.
- The machine must be operated and maintained in accordance with the instructions provided in this manual.
- Classifications for fuel, lubricants and fluids stated in the instructions must be adhered to.
- Genuine Timberjack spare parts must be used.

AK12300,000002C –19–09OCT01–1/1

Warranty Service

The machine is tested and test-run prior to delivery and it can be put into use immediately. To ensure reliable operation of the machine it is essential that thorough servicing of the machine is made after putting it into operation.

A service workshop authorized by the Timberjack Group is to carry out service on the machine after about 250 hours of operation to keep the guarantee valid.

Naturally the validity of warranty requires that during the warranty period all the maintenance procedures have to be performed according to the maintenance intervals detailed in this manual.

AK12300,000002D –19–09OCT01–1/1

Contents

	Page		Page
Safety — Safety Features			
Timberjack 1070D Harvester Safety		Shut Down Engine, Disconnect Battery	
Features	1-1-1	Cable	1-4-4
Safety — General Precautions			
General	1-2-1	Service Cooling System Safely	1-4-4
Recognize Safety Information	1-2-1	Prevent Battery Explosions	1-4-4
Understand Signal Words	1-2-1	Prevent Acid Burns	1-4-5
Prepare for Emergencies	1-2-2	Start Only from Operator's Seat	1-4-5
Wear Protective Clothing	1-2-2	Beware of Exhaust Fumes	1-4-6
Handle Fluids Safely — Avoid Fires	1-2-3	Avoid High Pressure Fluids	1-4-6
Handle Chemical Products Safely	1-2-3	Avoid Heating near Pressurized Fluid Lines	1-4-7
Replace Safety Signs	1-2-3	Make Welding Repairs Safely	1-4-7
Maintain Safety Cabin	1-2-4	Service Tires Safely	1-4-8
Install Radio Transmitters Properly	1-2-4	Refueling and Servicing Fuel System	1-4-8
		Dispose of Waste Properly	1-4-9
Safety — Operating Precautions			
Inspect Machine	1-3-1	Cabin and Controls	
Attach Do not Operate Tag	1-3-1	Cab Component Locator	2-1-1
Prevent Machine Runaway	1-3-2	Main Switch	2-1-2
Use Handholds and Steps	1-3-3	Control Lights	2-1-2
Prepare Secondary Exits before Starting	1-3-4	Dashboard	2-1-4
Handle Starting Fluids Safely	1-3-4	Boom Controls	2-1-7
Pay Attention to Bystanders	1-3-5	Control Keypads	2-1-8
Keep Riders of the Machine	1-3-5	Air Conditioner, Operation Instructions	2-1-9
Use Seat Belt	1-3-6	Pedals	2-1-10
Avoid Risks under Difficult Conditions	1-3-6	Adjusting the Operator's Seat	2-1-11
Stop Working if Machine Gives an Alarm	1-3-7	Operating Instructions	
Keep Danger Zone Clear	1-3-7	General	3-1-1
Avoid Crush Points	1-3-8	Safety Switches and Emergency Stop	3-1-1
Avoid Power Cables	1-3-9	Boom	3-1-2
Driving/Transporting on Public Roads	1-3-10	Brakes	3-1-2
Ensure Safety before Driving on Frozen		Steering	3-1-3
Waters	1-3-11	High/Low Gear and Front Wheel Drive	3-1-4
Prevent Fires	1-3-12	Differential Locks	3-1-5
What to Do if the Machine Fires?	1-3-13	Frame Brake	3-1-5
Safety — Maintenance Precautions			
General	1-4-1	Before Starting the Engine for the First	
Before Servicing	1-4-2	Time in a Working Day	3-1-6
Use Proper Clothing	1-4-2	Starting the Engine	3-1-7
Use Proper Tools	1-4-3	Cold Weather Starting	3-1-9
Support Machine Properly	1-4-3	After Starting	3-1-10
		Turning off the Engine	3-1-11

Continued on next page

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

COPYRIGHT © 2002
DEERE & COMPANY
Moline, Illinois
All rights reserved
A John Deere ILLUSTRATION® Manual

Contents

	Page		Page
Off-Road Driving	3-1-12	At the End of the Day Make the	
On-Road Driving	3-1-13	Following Maintenance and Check-Ups	4-4-6
		Fill Up the Fuel Tank	4-4-7
 Transporting and Towing			
Transporting the Machine	3-2-1	Maintenance — Every 50 Hours or Weekly	
Towing the Machine	3-2-2	Check the Driving Brake Oil Level and	
Releasing the Parking Brake	3-2-3	Window Washer Fluid Level	4-5-1
Disengaging the Power Transmission		Grease the Center Hinge Bearings and	
System	3-2-3	Steering Cylinder Bearings	4-5-1
Releasing the Work Brake	3-2-4	Other Procedures	4-5-1
Releasing the Steering	3-2-4		
Stowing a Disabled Boom	3-2-5	Maintenance — Every 250 Hours	
		Clean the Machine	4-6-1
Maintenance — General		Check the Drive Belts Condition	4-6-1
Maintenance	4-1-1	Check Oil Levels in the High/Low Gear,	
Servicing Safety Precautions	4-1-2	Differentials, Bogie Casings and Hub	
Assembly Instructions	4-1-3	Gears	4-6-2
Tightening Torque for Bolted Joints	4-1-3	Grease Bogie Bearings	4-6-3
Welding Instructions	4-1-5	Other Procedures	4-6-3
Instructions for Cleaning of Lexan/Marguard			
Windows	4-1-7	Maintenance — Every 500 Hours	
Wheels	4-1-8	Change Engine Oil And Oil Filter	4-7-1
Changing Wheels	4-1-8	Clean Crank Case Vent Tube	4-7-2
Anti-Slip Fitting	4-1-9	Check Air Intake System	4-7-2
Bogie Tracks, Fitting	4-1-10	Replace Fuel Filters	4-7-3
		Check Belt Tensioner and Belt Wear	4-7-4
Maintenance — Lubricants and Fluids		Check Cooling System and Coolant Solution . .	4-7-6
Recommended Lubricants and Fluids	4-2-1	Remove Sediment and Water from the	
Capacities	4-2-2	Fuel Tank	4-7-7
Diesel Fuel	4-2-3	Check the Batteries for Charge and	
Engine Oil	4-2-4	Electrolyte Level	4-7-8
Coolant	4-2-5	Check Wear on Frame Brake Linings	4-7-8
Grease	4-2-5	Grease the Driveshafts	4-7-9
Hydraulic Oil	4-2-6	Other Procedures	4-7-9
Brake Fluid	4-2-6		
Gear Oil	4-2-6	Maintenance — Every 1000 Hours	
		Change Hydraulic Oil and Return Filters	
Maintenance Intervals		(2 pcs)	4-8-1
Checklist — Base Machine	4-3-1	Change the Hydraulic Tank Breather	4-8-2
Required Parts	4-3-1	Change the Filter of the Driving Pump	4-8-2
		Check the Exhaust Manifold	4-8-3
		Other Procedures	4-8-3
Maintenance — Every 10 Hours or Daily		Maintenance — Every 2000 Hours	
Check the Hydraulic Oil Level	4-4-1	Check Valve Clearance	4-9-1
Check the Engine Oil Level	4-4-1	Check Crankshaft Vibration Damper	4-9-3
Remove Sediment and Water from the		Change the Coolant	4-9-4
Primary Fuel Filter	4-4-2	Change Oil in the High/Low Gear,	
Check the Coolant Level	4-4-3	Differentials, Bogie Casings and Hub	
Check the Air Filter Indicator	4-4-4	Gears	4-9-6
Check the Radiator Grille Cleanliness	4-4-5	Other Procedures	4-9-9
Check the Tires Visually for Air Pressure			
and Overall Shape	4-4-5		
Other Procedures	4-4-6		

Continued on next page

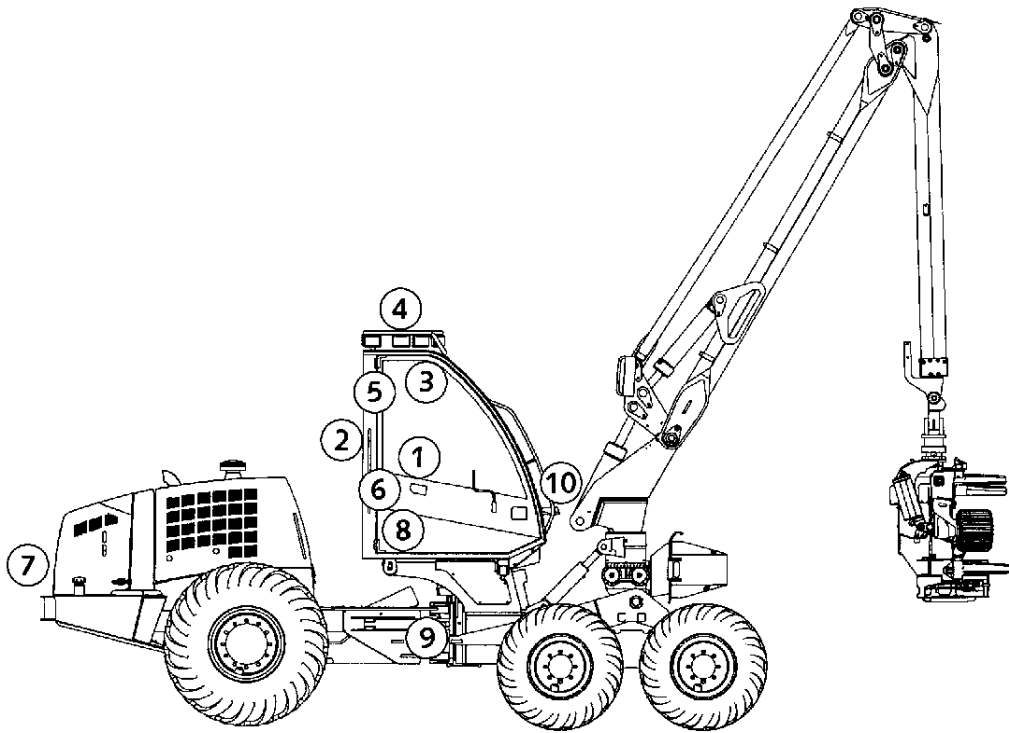
Page	Page
Maintenance — Periodic Maintenance	
Maintenance after every Six Months	4-10-1
Annual Maintenance	4-10-1
Maintenance — As Required	
When Necessary, Service and Adjust the Following	4-11-1
Adjusting the Rotator Link Brakes	4-11-1
Cleaning the Fuel Tank Filler Filter	4-11-2
Bleeding the Fuel System	4-11-2
Maintenance — Boom	
Maintenance Intervals	4-12-1
Every 10 Hours or Daily	4-12-2
Every 50 Hours or Weekly	4-12-3
Every 250 Hours	4-12-5
Every 1000 Hours	4-12-6
Every 2000 Hours	4-12-6
Hydraulic System — General	
Working Hydraulic System	5-1-1
Hydrostatic System	5-1-1
Hydraulic Tank	5-1-2
Vacuum Pump	5-1-4
Taking an Oil Sample from Hydraulic System . .	5-1-5
Hydraulic System — Bleeding	
Bleeding Air from the Hydraulic System	5-2-1
Bleeding Air from the Hydrostatic System	5-2-2
Bleeding Air From the Working Hydraulic System	5-2-4
Bleeding the Brakes	5-2-6
Hydrostatic System — Checking and Adjusting	
Supply Pressure on the Drive Pump	5-3-1
Drive Pressure	5-3-2
Drive Motor	5-3-4
Working Hydraulics — Checking and Adjusting	
General	5-4-1
Pilot Pressure, Working Hydraulics	5-4-1
Boom Valve, LS Pressure Limits	5-4-2
The Back-Pressure Valve of the Boom Tank Line	5-4-3
Maximum Pressure of the Working Hydraulic Pump	5-4-4
Pressure Difference Dp	5-4-5
Main Pressure Relief Valve	5-4-6
Brake System — Checking and Adjusting	
Checking the Brakes	5-5-1
Mechanical Adjustment of Brakes	5-5-2
Checking the Service Brake	5-5-3
Checking the Work Brake	5-5-3
Checking the Load and Release Range	5-5-4
Checking the Relief Valve of the Brake Charging Pressure	5-5-5
Hydraulic System — Hydraulic Scheme	
Hydraulic Scheme	5-6-1
Electrical System	
Batteries	6-1-1
Using Booster Batteries	6-1-2
Main Switch and Fuses	6-1-3
Fuse Box F1	6-1-4
Fuse Box F2	6-1-6
Electrical System — Sensors	
Engine	6-2-1
Hydraulic Tank	6-2-2
Transmission	6-2-2
Brake System	6-2-3
Fuel System	6-2-3
Position Sensors	6-2-4
Electrical System — Electrical Scheme	
Electrical Scheme	6-3-1
Transmission	
Transmission Operation	7-1-1
Hydrostatic System	7-1-2
Control of Transmission	7-1-3
Brakes	7-1-4
Boom	
General Description of the Boom	8-1-1
Operating Safety Precautions	8-1-1
General Operating Instructions	8-1-2
Technical Data	8-1-3
Tj 180 H 83	8-1-3
Tj 180 H 97	8-1-4
Tj 180 H 110	8-1-4
Rotator AV12S	8-1-4
Equipment — Air Conditioner	
Air Conditioner	9-1-1
Danger and Precautions	9-1-2
Configuration and Location of the Air Conditioner	9-1-3
Maintenance of the Air Conditioner	9-1-4
Troubleshooting the Air Conditioner	9-1-7

Continued on next page

	Page
Equipment — Engine and Cabin Preheater *)	
Configuration	9-2-1
Operation	9-2-2
Maintenance of the Engine Preheater	9-2-3
Timer for Engine and Cabin Preheater	9-2-4
Service Codes of the Engine Preheater	9-2-7
Equipment — Fire Extinguisher System *)	
Configuration and Use of the System	9-3-1
Control Unit	9-3-2
Maintenance	9-3-3
Hand-Held Fire Extinguishers	9-3-4
Equipment — Stump Treatment System *)	
Configuration and Operation	9-4-1
Equipment — Cabin Sideways Levelling *)	
Cabin Sideways Levelling Modes	9-5-1
Cabin Sideways Levelling Controls	9-5-1
Control System of Cabin Sideways Levelling	9-5-3
Maintenance of Cabin Sideways Levelling	9-5-4
Equipment — Seat Levelling *)	
Control Unit and Functions	9-6-1
Programming	9-6-1
Equipment — Boom Levelling *)	
Operation of Boom Levelling	9-7-1
Boom Levelling Controls	9-7-2
Specifications	
Dimensions and Weights	10-1-1
Alternative Wheel Equipment	10-1-1
Engine	10-1-2
Transmission	10-1-2
Axles	10-1-2
Brakes	10-1-3
Steering	10-1-3
Electrical System	10-1-3
Hydraulic System	10-1-3
Boom and Harvester Head	10-1-4
Cabin	10-1-4

Safety — Safety Features

Timberjack 1070D Harvester Safety Features



Please remember the Operator is the key to preventing accidents.

1. **Emergency stop.** Stops the machine and engages the parking brake.
2. **Secondary exits.** The rear window and the right side door can be used as secondary exits from the cab.
3. **Central warning light and alarms (+buzzer).** Alarm when malfunctions occur.
4. **Safety cabin.** Integrated rollover and operator protective structures fully enclose and protect the operator.
5. **Safety signs.** Warn and give safety information for the operator.
6. **Door safety switches.** No function can be engaged before door safety switches are reset.
7. **Back-up alarm (opt).** Alerts bystanders when machine is reversing.
8. **Hand-held fire extinguishers and fire extinguisher system (opt.)**
9. **Steering interlock.** The center hinge of the machine must be locked by fitting the steering interlock before starting any service work.
10. **Handrails, anti-slips on the steps, stairs.** Help to climb into the machine.

AK12300,0000031 -19-10OCT01-1/1

T158440 -UN-24SEP02

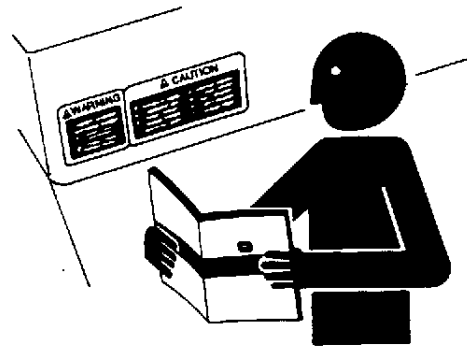
Safety — General Precautions

General

Should there be any information or instructions in this manual that are not in compliance with local laws and regulations in force in the country or region where this equipment is operated, the local laws and regulations must take precedence.

This machine should not be operated or maintained by personnel other than those who have been thoroughly trained.

As the maintainer ensure that you become familiar with all occupational safety regulations pertaining to forest machinery as well as all safety instructions pertaining to this equipment. Observe the instructions provided in this manual and on all hazard and information decals on the machine.



TS201 -UN-23AUG88

AK12300,000003C -19-28FEB02-1/1

Recognize Safety Information

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



T81389 -UN-07DEC88

AK12300,000003D -19-28FEB02-1/1

Understand Signal Words

A signal word — DANGER, WARNING, or CAUTION — is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



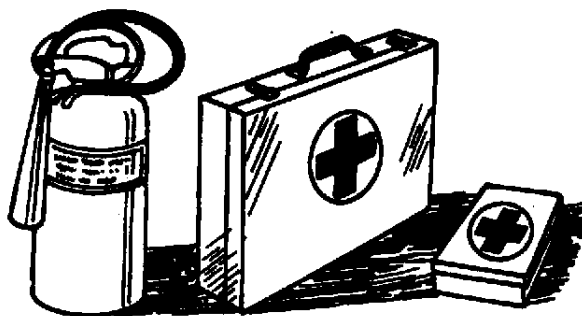
TS187 -19-30SEP88

AK12300,000003E -19-28FEB02-1/1

Prepare for Emergencies

Keep a first aid kit in an easily accessible location on the vehicle at all times. Check the first aid kit regularly and make sure you immediately replace all items you have used.

Learn to use first aid equipment and fire extinguishers. Keep emergency numbers always available or save those to your portable phone.



TS291 -UN-23AUG88

AK12300.000003F -19-28FEB02-1/1

Wear Protective Clothing

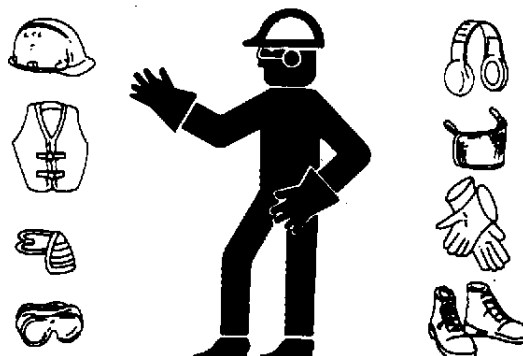
Wear close fitting clothing and safety equipment appropriate to the job.

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Safety face shield, glasses, or goggles should always be used as protection from pressurized fluid spray, flying debris, and other airborne matter when working with tools, power tools, welding equipment, and corrosive or dangerous chemicals.

Use a rubber apron and rubber gloves when working with corrosives and wear heavy work gloves and safety shoes when handling large heavy and sharp objects.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



TS206 -UN-23AUG88

AK12300.0000040 -19-28FEB02-1/1

Buy Now



Our support email:

ebooklibonline@outlook.com