

# **SERVICE MANUAL**

**Backhoe Loaders**  
**BI00C / BI00CLR / BI00CTC**  
**BI10C / BI10CTC / BI15C**

Print No. 84568042A



# **SERVICE MANUAL**

**Backhoe Loaders**  
**B100C / B100CLR**  
**B100CTC / B110C**  
**B110CTC / B115C**

Print No. 84568042A



**NEW HOLLAND**

**CONSTRUCTION**

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## TO READER

This manual has been printed for a skilful engineer to supply necessary technical information to carry out service operations on this machine.

Read carefully this manual to collect correct information relevant to repair procedures.

For any question or remark, or in case of any error relevant the contents of this manual, please contact:

**CNH ITALIA S.p.A.**  
Technical Information  
Via Plava, 80  
10135 Torino - Italy

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## REFERENCES

Beyond this Service Manual, also refer to the documents listed below:

- Operator's Manual
- Service Parts Catalogue

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## SERVICE MANUAL

The Service Manual consists of two volumes:

- B100C - B100CLR - B100CTC - B110C - B110CTC - B115C  
Service Manual for "Loader backhoe"
- B100C - B100CLR - B100CTC - B110C - B110CTC - B115C  
Service Manual for "Engine"

The Service Manuals for "Loader backhoe" and "Engine" contain the necessary technical information to carry out service and repair on machine and on engine, necessary tools to carry out those operations and information on service standard, on procedures for connection, disconnection, disassembly and assembly of parts.

The Service Manual which covers the loader backhoe models B100C - B100CLR - B100CTC - B110C - B110CTC - B115C consists of the following volumes, which can be identified by their print number as stated below:

VOLUME	MACHINE TYPE	PRINT NUMBER
Service Manual for "Loader backhoe"	B100C - B100CLR - B100CTC - B110C - B110CTC - B115C	84568042A
Service Manual - "Engine"	B100C - B100CLR - B100CTC - B110C - B110CTC - B115C	84496793

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## PREVENT ACCIDENTS

The majority of accidents and injuries which occur in the workshop, at the worksite or on the road, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason most accidents can be prevented by recognizing the real cause and taking the necessary precautions, before the accident occurs.

Regardless of the care used in design and construction of any type of equipment, there may be conditions that cannot be completely safeguarded against, without interfering with reasonable accessibility and efficient operation.

A careful operator and / or technician is the best insurance against accidents.  
The careful observance of this single safety rule would be sufficient to prevent serious injuries:

Never attempt to clean, lubricate or adjust a machine while it is in motion.

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### **WARNING**

Before carrying out any maintenance operation, adjustment and or repair on machines equipped with attachments, controlled hydraulically or mechanically, make sure that the attachment is lowered and safely set on the ground. If it is necessary to have the equipment partially or fully raised to gain access to certain items, be sure the equipment is suitably supported by means other than the hydraulic lift cylinders, cable and /or mechanical device used for controlling the equipment.

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**CNH ITALIA S.p.A.**  
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10135 Torino - Italy

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## LOADER BACKHOE MODELS

The complete range of Loader Backhoe models described in this manual are identified below:

	B100C B100CLR B100CTC	B110C B110CTC	B115C
Powershift	/	●	●
Powershuttle	●	●	/
Stabilizer sideshift	●	●	●
Stabilizer center pivot	/	/	●
Cab	●	●	●
Rops	/	/	/
2WD	/	/	/
4WD	●	●	●
4WS	/	/	●
Pilot control	●	●	●
Mechanical control	●	●	●
Engine Iveco 72 kW - 97 HP model F5HFL413C*A (electronic)	●	/	/
Engine 82 kW - 110 HP model F5HFL413B*A (electronic)	/	●	●
Short backhoe dipper	●	/	/
Long backhoe dipper	●	●	●

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# INDEX

## SECTION 00 - SAFETY RULES

FOREWORD.....	4
SAFETY INSTRUCTIONS .....	6
PREVENTION OF FIRE OR EXPLOSIONS.....	8
PREVENTION OF BURNS .....	9
PRECAUTIONS FOR WASTE DISPOSAL.....	10

## SECTION 01 - MAINTENANCE

## SECTION 02 - TECHNICAL SPECIFICATIONS

MODELS.....	3
IDENTIFICATION OF MAIN COMPONENTS.....	4
TECHNICAL SPECIFICATIONS.....	7
DIESEL ENGINE .....	7
TRANSMISSION.....	9
AXLES .....	10
BRAKES .....	10
STEERING.....	11
HYDRAULIC SYSTEM .....	11
FRONT COUNTERWEIGHT .....	12
BUCKETS.....	12
TYRES.....	13
DPF SYSTEM.....	14
DIMENSIONS AND PERFORMANCE.....	18
DIMENSIONS - 2WS SIDESHIFT .....	18
DIMENSIONS - 2WS CENTER PIVOT.....	19
DIMENSIONS - 2WS TC - SIDESHIFT .....	20
DIMENSIONS - 4WS SIDESHIFT .....	21
DIMENSIONS - 4WS CENTER PIVOT.....	22
LOADER ATTACHMENT PERFORMANCE.....	23
PERFORMANCE OF LOADER ATTACHMENT WITH FORKS .....	33
BACKHOE ATTACHMENT PERFORMANCE.....	38
BACKHOE ATTACHMENT LIFTING CAPACITY .....	58
MAXIMUM LIFTING LOADS.....	63
LOADER ATTACHMENT MAXIMUM LIFTING LOAD TABLE .....	63
BACKHOE ATTACHMENT MAXIMUM LIFTING LOAD TABLE .....	64
SUPPLY SUMMARY TABLE .....	65

**SECTION 10 - ENGINE**

REMOVAL AND INSTALLATION THE ENGINE HOOD, THE RADIATOR AND ENGINE .....	3
PRELIMINARY OPERATIONS .....	3
BATTERY.....	4
DISCONNECT .....	4
ENGINE HOOD.....	6
REMOVE.....	6
RADIATOR.....	9
REMOVE.....	9
ENGINE .....	16
REMOVE.....	16
INSTALL.....	26
RADIATOR.....	35
INSTALL.....	35
ENGINE HOOD.....	41
INSTALL.....	41
BATTERY.....	44
CONNECT .....	44
ENGINE ERROR CODES.....	46

**SECTION 21 - TRANSMISSION**

POWERSHUTTLE TRANSMISSION.....	3
TECHNICAL SPECIFICATIONS.....	4
CONTROLS .....	8
LUBRICATION .....	12
GREASING .....	15
REMOVAL FROM MACHINE .....	17
DISASSEMBLY AND ASSEMBLY.....	20
TROUBLESHOOTING .....	132
TRANSMISSION ERROR CODES.....	136
REPAIR TIMES.....	140
SPECIAL TOOLS.....	141
POWERSHIFT TRANSMISSION.....	142
TECHNICAL SPECIFICATIONS.....	142
CONTROLS .....	153
LUBRICATION.....	155
GREASING .....	157
REMOVAL FROM MACHINE .....	158
DISASSEMBLY AND ASSEMBLY.....	161
TROUBLESHOOTING .....	325
TRANSMISSION ERROR CODES .....	329
REPAIR TIMES.....	333
SPECIAL TOOLS.....	334

---



**SECTION 25 - FRONT AXLES**

2WS FRONT AXLE.....	3
TECHNICAL SPECIFICATIONS.....	3
LUBRICATION AND GREASING .....	4
REMOVAL FROM MACHINE .....	6
DISASSEMBLY AND ASSEMBLY.....	7
TROUBLESHOOTING.....	7
4WD - 2WS FRONT AXLE .....	10
TECHNICAL SPECIFICATIONS.....	10
LUBRICATION AND GREASING .....	11
REMOVAL FROM MACHINE .....	13
DISASSEMBLY AND ASSEMBLY.....	14
TROUBLESHOOTING.....	57
SPECIAL TOOLS.....	61
4WS FRONT AXLE.....	62
TECHNICAL SPECIFICATIONS.....	62
LUBRICATION AND GREASING .....	63
REMOVAL FROM MACHINE .....	65

**SECTION 27 - REAR AXLE**

2WS REAR AXLE (B100C - B100CTC).....	3
TECHNICAL SPECIFICATIONS.....	3
LUBRICATION AND GREASING .....	5
REMOVAL FROM MACHINE .....	7
DISASSEMBLY AND ASSEMBLY.....	8
TROUBLESHOOTING.....	61
REPAIR TIMES.....	67
SPECIAL TOOLS.....	68
2WS REAR AXLE (B110C - B110CTC).....	69
TECHNICAL SPECIFICATIONS.....	69
LUBRICATION AND GREASING .....	71
REMOVAL FROM MACHINE .....	73
DISASSEMBLY AND ASSEMBLY.....	74
TROUBLESHOOTING.....	127
REPAIR TIMES.....	133
SPECIAL TOOLS.....	134
4WS REAR AXLE (B115C).....	135
TECHNICAL SPECIFICATIONS.....	135
LUBRICATION AND GREASING .....	138
REMOVAL FROM MACHINE .....	140
DISASSEMBLY AND ASSEMBLY.....	141
TROUBLESHOOTING.....	219
REPAIR TIMES.....	225
SPECIAL TOOLS.....	227

---

**SECTION 33 - BRAKE SYSTEM**

PARKING BRAKE .....	3
TECHNICAL SPECIFICATIONS.....	3
OPERATION.....	3
ADJUSTMENT.....	4
DISASSEMBLY AND ASSEMBLY.....	6
SERVICE BRAKE .....	15
TECHNICAL SPECIFICATIONS.....	15
OPERATION.....	15
BRAKE PUMP - Remove.....	16
BRAKE PUMP - Install.....	18

**SECTION 35 - HYDRAULIC SYSTEM**

HYDRAULIC DIAGRAMS .....	3
HYDRAULIC DIAGRAM - 2WS SIDESHIFT MECHANICAL MODELS POWERSHUTTLE (B100C - B100CTC).....	3
HYDRAULIC DIAGRAM - 2WS SIDESHIFT PILOT MODELS POWERSHUTTLE (B100C - B100CTC - B110C - B110CTC) .....	5
HYDRAULIC DIAGRAM - 2WS SIDESHIFT PILOT MODELS POWERSHUTTLE (B100CLR) .....	7
HYDRAULIC DIAGRAM - 2WS SIDESHIFT MECHANICAL MODELS POWERSHUTTLE (B100CLR) .....	9
HYDRAULIC DIAGRAM - 2WS SIDESHIFT MECHANICAL MODELS POWERSHIFT (B110CTC).....	11
HYDRAULIC DIAGRAM - 4WS SIDESHIFT MECHANICAL MODELS POWERSHIFT (B115C).....	13
HYDRAULIC DIAGRAM - 4WS SIDESHIFT PILOT MODELS POWERSHIFT (B115C).....	15
HYDRAULIC DIAGRAM - 4WS CENTER PIVOT PILOT MODELS POWERSHIFT (B115C).....	17
HYDRAULIC PUMP .....	19
HYDRAULIC FIXED-FLOW-RATE GEAR PUMP.....	19
HYDRAULIC VARIABLE-FLOW-RATE PISTON PUMP.....	30
CONTROL VALVES.....	44
LOADER CONTROL VALVE .....	53
BACKHOE ATTACHMENT CONTROL VALVE.....	57
RELIEF VALVES.....	69
BACKHOE ATTACHMENT CONTROL VALVE PILOT SOLENOID VALVE .....	78
ACCUMULATOR "AUTO GLIDE RIDE" PARKER .....	81
TECHNICAL SPECIFICATIONS.....	81
MAINTENANCE .....	81
SAFETY .....	81
CHECKING AND ADJUSTING THE PRECHARGE PRESSURE .....	82
HYDRAULIC SWING SYSTEM .....	84
OPERATION.....	84
HYDRAULIC CYLINDERS.....	87
LOADER ATTACHMENT BOOM CYLINDER.....	88
LOADER BUCKET CYLINDER.....	95
4X1 LOADER BUCKET CYLINDER .....	101
BACKHOE BOOM CYLINDER .....	104
BACKHOE ATTACHMENT DIPPER CYLINDER .....	108
BACKHOE BUCKET CYLINDER.....	112
TELESCOPIC CYLINDER .....	116

---

---

## INDEX

---

STABILIZER CYLINDER - CENTER PIVOT .....	120
STABILIZER CYLINDER - SIDESHIFT .....	124
SWING CYLINDER.....	128
BACKHOE ATTACHMENT LOCK CYLINDER - SIDESHIFT .....	132
SPECIAL TOOLS.....	133
HYDRAULIC CONTROL LEVERS .....	134
TECHNICAL SPECIFICATIONS.....	134
CONTROLS AND OPERATION .....	135
COMPONENTS .....	136
DISASSEMBLY AND ASSEMBLY.....	138
CONTROL LEVER VALVE .....	141
TROUBLESHOOTING.....	143
PRELIMINARY CHECKS.....	143
TROUBLESHOOTING (WITH "REXROTH" CONTROL VALVES).....	144
SWING.....	146
HYDRAULIC PUMP .....	147

### **SECTION 39 - CHASSIS**

DESCRIPTION .....	3
REMOVAL AND INSTALLATION OF COMPONENTS .....	6
COMPONENTS WITHIN THE CHASSIS .....	6
COMPONENTS OF THE LOWER PART OF THE CHASSIS .....	7
COMPONENTS ATTACHED OUTSIDE THE CHASSIS.....	11
COMPONENTS OF THE UPPER PART .....	12

### **SECTION 41 - STEERING SYSTEM**

DESCRIPTION .....	3
2WS STEERING SYSTEM.....	4
4WS STEERING SYSTEM.....	7
POWER STEERING .....	11
TECHNICAL SPECIFICATIONS.....	11
COMPONENTS .....	13
DISASSEMBLY.....	15
ASSEMBLY.....	18

### **SECTION 50 - CAB HEATING AND AIR CONDITIONING**

TECHNICAL SPECIFICATIONS.....	3
GENERAL.....	3
CAB HEATING.....	5
CONTROLS.....	5
OPERATION.....	6
OVERHAUL .....	9
TROUBLESHOOTING.....	11

---

---

*INDEX*

---

AIR CONDITIONING.....	12
PRINCIPLES OF AIR CONDITIONING .....	12
CONTROLS .....	17
OPERATION.....	18
TROUBLESHOOTING AND TESTING.....	25
FLUSHING THE SYSTEM.....	43
DRAINING THE SYSTEM.....	45
CHARGING THE SYSTEM.....	46
OVERHAUL .....	47
COMPRESSOR .....	52
TECHNICAL SPECIFICATIONS.....	52
REMOVAL AND INSTALLATION .....	53
DISASSEMBLY AND ASSEMBLY.....	56
TROUBLESHOOTING.....	65

**SECTION 55 - ELECTRIC SYSTEM**

ELECTRIC DIAGRAMS .....	3
ELECTRIC DIAGRAMS - POWERSHUTTLE CAB (B100C - B100CTC - B110C - B110CTC).....	3
ELECTRIC DIAGRAMS - POWERSHIFT CAB (B110C - B110CTC) .....	21
ELECTRIC DIAGRAMS - 4WS POWERSHIFT CAB (B115C) .....	40
CONTROLS AND INSTRUMENTS.....	59
FRONT INSTRUMENT PANEL .....	59
SIDE INSTRUMENT CLUSTER PANEL (B100C - B100CTC - B110C - B110CTC - B115C).....	62
SIDE INSTRUMENT CLUSTER (B100C - B100CTC - B110C - B110CTC - B115C).....	64
ANTI-START SYSTEM .....	66
DIAGNOSTIC DISPLAY (B100C - B100CTC - B110C - B110CTC - B115C).....	67
SYMBOLS.....	69
SETUP MENU.....	70
PROCEDURE ABOUT SELF TEST.....	71
ON BOARD ERROR CODE RETRIEVAL.....	72
BACKLIGHTING AND DIMMING.....	73
WORK HOURS .....	74
OPERATION.....	75
WARNING SYSTEM.....	79
MAINTENANCE .....	80
WARNING MESSAGES.....	82
STARTING SYSTEM .....	88
OPERATION.....	88
STARTER MOTOR.....	91
TROUBLESHOOTING.....	98
ALTERNATOR .....	100
TECHNICAL SPECIFICATIONS.....	100
OPERATION.....	100
COMPONENTS .....	102
REMOVAL.....	103
PRELIMINARY CHECKS AND TESTS.....	104
TROUBLESHOOTING.....	113

---

---

## INDEX

---

BATTERY .....	114
TECHNICAL SPECIFICATIONS.....	114
OPERATION.....	114
REPLACEMENT .....	115
CHARGE AND ELECTROLYTE LEVEL CHECK .....	116
CONNECTING A BOOSTER BATTERY .....	117
BATTERY MASTER SWITCH .....	117
TROUBLESHOOTING.....	118

### **SECTION 82 - LOADER**

LOADER ATTACHMENT CONTROLS.....	4
LOADER ATTACHMENT OPERATION .....	4
4x1 LOADER BUCKET CONTROL (Optional) .....	7
LOADER ATTACHMENT CONTROL LOCK (Specific to certain countries).....	8
LOADER BUCKET SELF-LEVELLING.....	9
LOADER ATTACHMENT SAFETY STRUT.....	12
LOADER ATTACHMENT SAFETY STRUT (B100C - B110C).....	12
LOADER ATTACHMENT SAFETY STRUT (B100CTC - B110CTC - B115C) .....	14
REMOVAL AND INSTALLATION OF LOADER BUCKET .....	15
LOADER BUCKET (B100C - B110C).....	15
LOADER BUCKET (B100CTC - B110CTC - B115C) .....	16
LOADER BUCKET WITH FORKS (Optional) .....	17
BUCKET TEETH REPLACEMENT.....	18
LOADER REMOVAL.....	19
LOADER ATTACHMENT (B100C - B110C).....	19
LOADER ATTACHMENT (B100CTC - B110CTC - B115C) .....	21

### **SECTION 84 - BACKHOE**

DESCRIPTION AND OPERATION.....	3
BACKHOE ATTACHMENT CONTROLS.....	6
BACKHOE ATTACHMENT MECHANICAL CONTROLS .....	7
BACKHOE ATTACHMENT HYDRAULIC CONTROLS .....	17
BACKHOE ATTACHMENT SIDESHIFT (Sideshift version) .....	23
BACKHOE ATTACHMENT DISASSEMBLY .....	25
CENTER PIVOT BACKHOE ATTACHMENT DISASSEMBLY.....	25
SIDESHIFT BACKHOE ATTACHMENT DISASSEMBLY.....	28
BACKHOE BUCKET REPLACEMENT .....	30
BUCKET TEETH REPLACEMENT.....	31
DIPPER REMOVE .....	32
TELESCOPIC DIPPER REVISION.....	35
OVERHAUL .....	35
BACKHOE ATTACHMENT HYDRAULIC HANDLING .....	38
CONTROLS.....	38
HYDRAULIC DIAGRAM .....	38
DISASSEMBLY AND ASSEMBLY.....	39

---

## *INDEX*

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**B100C - B100CLR - B100CTC**

**B110C - B110CTC**

**B115C**



**SECTION 00 - SAFETY RULES**





## SAFETY INSTRUCTIONS

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 **WARNING** 

This warning symbol points out important messages involving your safety.

Carefully read the safety rules contained herein and follow advised precautions to avoid potential hazards and to safeguard your safety and personal integrity.

In this manual you will find this symbol together with the following keywords:

---

---

 **WARNING** 

This symbol warns about the possibility of potential damages to the machine that can involve the operator's safety.

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 **WARNING** 

With specific warnings about potential dangers for the operator's or other persons integrity directly or indirectly involved.

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The non-compliance with the warnings preceded by the above-mentioned keywords (WARNING and DANGER) can cause serious accidents or even the death of the persons involved.

Moreover, in the present Manual, some instructions are given with text in italics, preceded by the words **NOTE** and **CAUTION**.

**NOTA:** *it emphasizes and underlines to the operator the correct technique or correct procedure to follow.*

---

 **WARNING** 

This symbol warns about the possibility of potential damages to the machine that can involve the operator's safety.

---

## FOREWORD

Loader backhoes B100C - B100CLR - B100CTC - B110C - B110CTC - B115C have been designed to perform most earth-moving operations.

If you use this machine for duties involving the use of attachments, accessories, or special tools, consult your Dealer to make sure that the adaptations or modifications carried out are in conformity with the machine's technical specifications and with current regulations on safety.

Any modifications or adaptations which are not approved by the manufacturer may invalidate the machine's original conformity with safety requirements.

The machine must be used according to its intended use, respecting the safety and precautionary rules and strictly following the operating instructions.

Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately.

———— **⚠ DANGER ⚠** ————

A different use of the excavator or of its working equipment:

- for lifting or transporting persons;
- as working platform;
- for lifting loads without the attachment being approved for this purpose;
- for pulling loads;
- is considered unintended use.

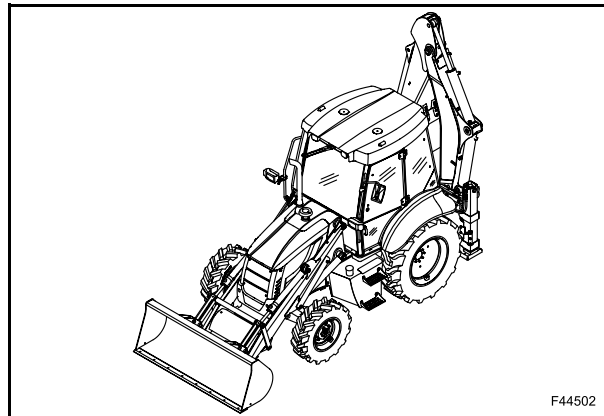
Unintended use may cause injury or life-threatening risks for the operator and for other persons.

The manufacturer/supplier cannot be held responsible for any damage resulting from unintended use. The risk involved in such misuse lies entirely with the user.

———— **⚠ DANGER ⚠** ————

It is absolutely forbidden to tamper with and/or change the setting of any of the hydraulic system valves to avoid damaging machine components, with a consequent risk for personal safety.

The current Operator's Manual is the user's guide for correct run-in, use and maintenance of the machine.



Carefully read this Operator's Manual and store it in the cab for quick location and reference.

Instructions concerning safety, operation and maintenance have been developed to permit safe service and repair of this machine without any risk.

In the event of queries or suggestions relevant to your machine do not hesitate to address to your Dealer.

Dealers have qualified and trained personnel at disposal as well as Original Spares, means and equipment suitable to carry out all necessary maintenance.

Any modifications or adaptations which are not approved by the manufacturer may invalidate the machine's original conformity with safety requirements.

**IMPORTANTE:** *the engine and fuel system on your machine are designed and built to government emissions standards. Tampering by dealers, customers, operators and users is strictly prohibited by law. Failure to comply with this prohibition could result in government fines, rework charges, invalid warranty, legal action and possible confiscation of the machine until rework to original condition is completed. Engine service and/or repairs must be carried out by a certified technician only.*

**NOTA:** *each machine is supplied complete with a copy of this Manual. Descriptions and illustrations provided herein are not binding. The Manufacturer, provided that the basic characteristics of machine types described and shown in this Manual remain the same, reserves the right to change components, parts and accessories supplied without any commitment to timely update this publication; and this any time it deems it convenient for improvement purposes or due to commercial or manufacturing requirements. For exact information, please consult your Dealer or contact the Manufacturer's Branch Offices, who remain at your disposal for further help.*

## SPARE PARTS

The "non-genuine" spare parts have not been checked and authorized by the Manufacturer.

The assembly and/or use of such products may have negative effects on the machine design features and could impair its operation safety.

The Manufacturer is not liable for any damage caused by "non-genuine" spare parts or accessories.

## WARRANTY

This machine is under warranty according to the regulations in force in Your Country and in compliance with the sales agreement drawn up with the Dealer.

The warranty, however, expires if the operation and maintenance instruction for this machine and contained in this manual, have not been followed.

## SAFETY INSTRUCTIONS

Carefully read the safety rules contained herein and follow advised precautions to avoid potential hazards and to safeguard your safety and personal integrity.

Your safety and that of the people around you depends on you.

It is essential that you understand this manual for a correct inspection, lubrication and repair of this machine.

Read this manual carefully and check that:

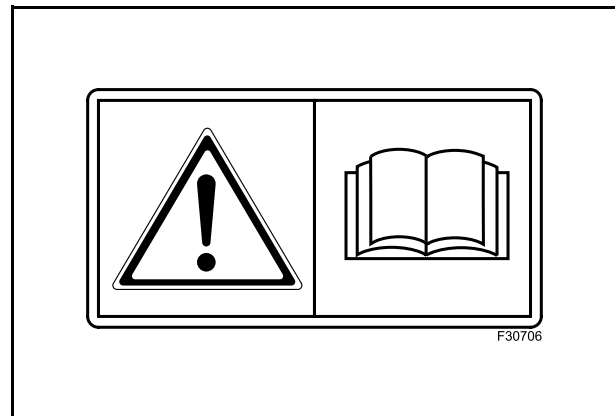
- you understand fully the symbols on the controls and the safety signs used in this manual and on the machine;
- you understand fully the speed, stability, braking and steering characteristics of the machine. If you are in any doubt, consult your Dealer.

The safety messages in this section concern situations which may arise during normal machine operation, servicing and repair. These safety messages also indicate the different ways of coping with these situations. Other safety messages are used throughout the manual to indicate specific dangers.

The information given in this chapter is a summary of the basic rules to respect at all times and does not exempt you from observing traffic regulations or the requirements of insurance companies.

The presence of grease, oil, mud or (in winter) ice on the steps and access handles can cause accidents. Make sure they are always clean.

When mounting or dismounting from the machine always face the machine and use the steps and access handles on the left-hand side of the machine.



Wear close fitting clothing and safety equipment appropriate for the job:

- safety helmet;
- safety shoes;
- heavy gloves;
- reflective clothing;
- wet weather clothing.

If the environment conditions make it necessary, the following personal safety equipment should be at hand:

- respirators (or dustproof masks);
- ear plugs or acoustic ears protections;
- goggles with lateral shield or masks for eyes protection.

Do not wear rings, wristwatches, jewels, unbuttoned or flapping clothing such as ties, torn clothes, scarves, open jackets or shirts with open zips which could get caught into moving parts.

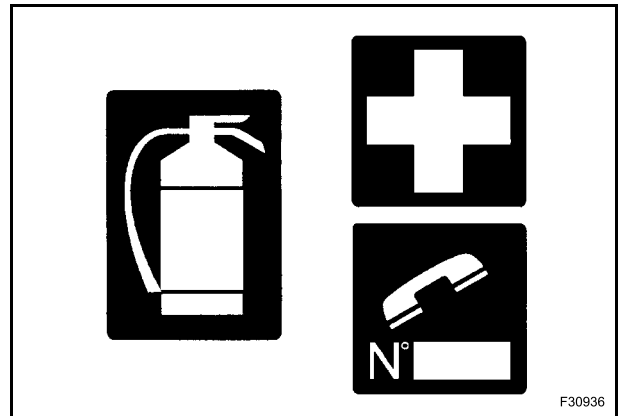
Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately.

Make sure that you fully understand the symbols of the safety decals applied on the machine. Make sure that they are always clean and perfectly legible.

Be prepared for emergencies.

Always keep a first aid kit and a fire extinguisher close at hand on the machine.

Make sure that the fire extinguisher is serviced in accordance with the manufacturer's instructions.



**Thanks very much for your reading,  
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manual**

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[admin@servicemanualperfect.com](mailto:admin@servicemanualperfect.com)**