DX140W/DX160W

Operation and Maintenance Manual

K1024898E

Serial Number 5001 and Up

September 2006



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Specification 7-1

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Safety

TO THE OPERATOR OF A *DOOSAN* DAEWOO EXCAVATOR

⚠ DANGER!

Unsafe use of the excavator could lead to serious injury or death. Operating procedures, maintenance and equipment practices or traveling or shipping methods that do not follow the safety guidelines on the following pages could cause serious, potentially fatal injuries or extensive damage to the machine or nearby property.

Please respect the importance of taking responsibility for your own safety, and that of other people who may be affected by your actions.

The safety information on the following pages is organized into the following sections:

1. “Location of Safety Labels” on page 1-5
2. “Summary of Safety Precautions for Lifting in Digging Mode” on page 1-13
3. “Unauthorized Modifications” on page 1-14
4. “General Hazard Information” on page 1-14
5. “Before Starting Engine” on page 1-23
6. “Machine Operation” on page 1-27
7. “Maintenance” on page 1-33
8. “Battery” on page 1-41
9. “Towing” on page 1-43
10. “Shipping and Transportation” on page 1-44
11. “Excavator Rated Lift Capacity Tables” on page 1-45

⚠ WARNING!

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

Operator and maintenance personnel should read this manual thoroughly before beginning operation or maintenance.

Keep this manual in the storage compartment to the rear of the operator's seat, and have all personnel involved in working on the machine read the manual periodically.

Some actions involved in operation and maintenance of the machine can cause a serious accident, if they are not done in a manner described in this manual.

The procedures and precautions given in this manual apply only to intended uses of the machine.

If you use your machine for any unintended uses that are not specifically prohibited, you must be sure that it is safe for any others. In no event should you or others engage in prohibited uses or actions as described in this manual.

***DOOSAN* delivers machines that comply with all applicable regulations and standards of the country to which it has been shipped. If this machine has been purchased in another country or purchased from someone in another country, it may lack certain safety devices and specifications that are necessary for use in your country. If there is any question about whether your product complies with the applicable standards and regulations of your country, consult *DOOSAN* or your *DOOSAN* distributor before operating the machine.**

SAFETY ALERT SYMBOL

Be Prepared - Get to Know All Operating and Safety Instructions.

This is the Safety Alert Symbol. Wherever it appears in this manual or on safety signs on the machine you should be alert to the potential for personal injury or accidents. Always observe safety precautions and follow recommended procedures.

Learn the Signal Words Used with the Safety Alert Symbol

The words "CAUTION," "WARNING," and "DANGER" used throughout this manual and on decals on the machine indicate degree of risk of hazards or unsafe practices. All three degrees of risk indicate that safety is involved. Observe precautions indicated whenever you see the Safety Alert "Triangle," no matter which signal word appears next to the "Exclamation Point" symbol.

CAUTION!

This word is used on safety messages and safety labels and indicates potential of a hazardous situation that, if not avoided, could result in minor or moderate injury. It may also be used to alert against a generally unsafe practice.

WARNING!

This word is used on safety messages and safety labels and indicates potential of a hazardous situation that, if not avoided, could result in serious injury or death. It may also be used to alert against a highly unsafe practice.

DANGER!

This word is used on safety messages and safety labels and indicates an imminent hazard of a situation that, if not avoided, is very likely to cause death or extremely serious injury. It may also be used to alert against equipment that may explode or detonate if handled or treated carelessly.

Safety precautions are described in SAFETY from page 1-5 on.

DOOSAN cannot predict every circumstance that might involve a potential hazard in operation and maintenance. Therefore the safety messages in this manual and on the machine may not include all possible safety precautions. If any procedures or actions not specifically recommended or allowed in this manual are used, you must be sure that you and others can do such procedures and actions safely and without damaging the machine. If you are unsure about the safety of some procedures, contact a *DOOSAN* distributor.



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