

# **Technical Manual**

## **John Deere 690B Excavator**

**John Deere Davenport Works  
TM-1093 (Feb-82)**



Litho in U.S.A.

## JD690-B EXCAVATOR

Technical Manual  
TM-1093 (Feb-82)

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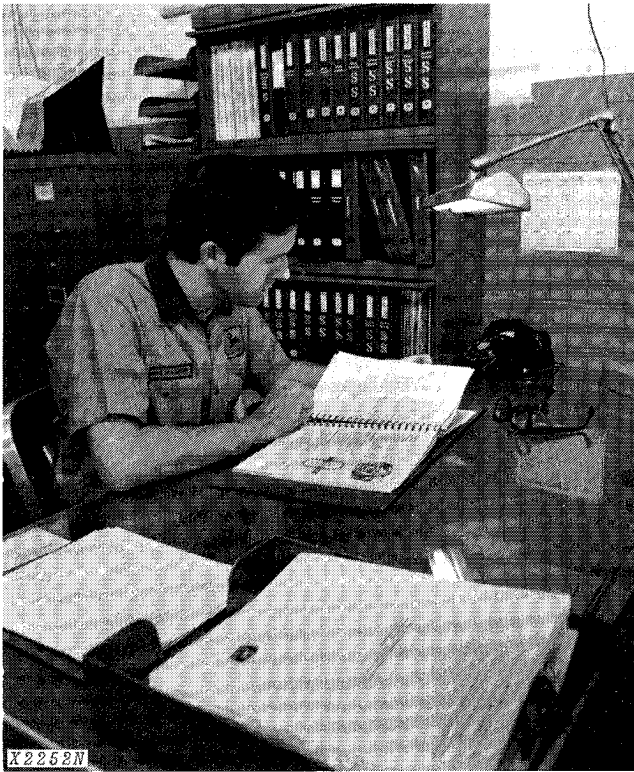
*The specifications and design information contained in this manual were correct at the time it was printed. It is John Deere's policy to continually improve and update our machines. Therefore, the specifications and design information are subject to change without notice. Wherever applicable, specifications and design information are in accordance with SAE and IEMC standards.*

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## INTRODUCTION



*Use FOS Manuals for Reference*



*Use Technical Manuals for Actual Service*

This technical manual is part of a twin concept of service:

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

### •FOS Manuals—for reference

Fundamentals of Service (FOS) Manuals cover basic theory of operation, fundamentals of trouble shooting, general maintenance, and basic types of failure and their causes. FOS Manuals are for training new personnel and for reference by experienced service technicians.



When a service technician should refer to a FOS Manual for more information, a FOS symbol like the one at the left is used in the technical manual.

### •Technical Manuals—for actual service

*Technical Manuals are concise service guides for specific machines.* Technical manuals are on-the-job guides containing only the vital information needed by an experienced service technician.

This technical manual was written for you—an experienced service technician. Keep it in a permanent binder in the shop where it is handy. Read it when you need to know correct service procedures or specifications.

Some features of this manual:


- Inside front cover - "Table of Contents" and "Maintenance Without Accident".
- Section 10 - General specifications and services.
- Sections 20 through 60 - Removal, repair, testing (components removed), installation, and adjustment.
- Section 70 - Detailed explanation of system operation, diagnosis, visual inspection, testing, and adjustments.
- Specifications are listed and illustrated at the end of each section.

## MAINTENANCE WITHOUT ACCIDENT WORK SAFELY

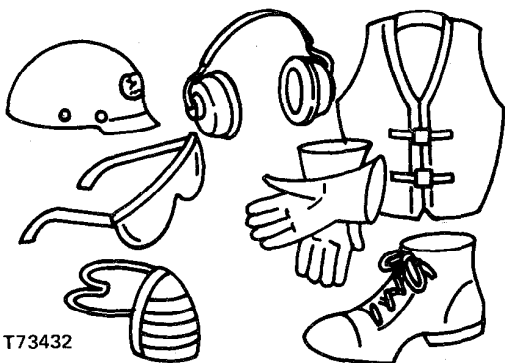


T27999N

I27999N

 This safety symbol is used for important safety messages. When you see this symbol, follow the safety message to avoid personal injury.

**EVERY EMPLOYER HAS A SAFETY PROGRAM. KNOW WHAT IT IS!**



T73432

T73432

See your shop supervisor for specific instructions on a job, and the safety equipment you may need.

RIGHT

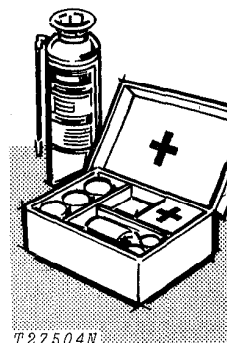


WRONG

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### BE ALERT!

Plan ahead — work safely — know how to use a first aid kit and a fire extinguisher — and where to get assistance.



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### Maintenance Area

Make sure the maintenance area has enough ventilation.

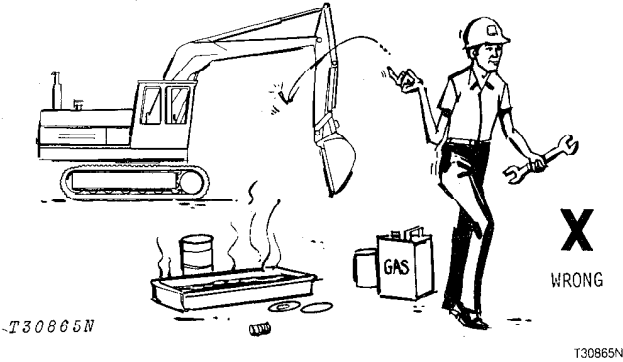
Keep the maintenance area **CLEAN AND DRY**. Oily and wet floors are slippery. Greasy rags are a fire hazard. When you work with electrical equipment, wet spots are dangerous.

Keep starting aids in a cool, well-ventilated place, out of reach of unauthorized personnel.

## MAINTENANCE WITHOUT ACCIDENT

### AVOID FIRE HAZARDS -

#### Fuel Is Dangerous!



Do not smoke while you fill the fuel tank.

Do not smoke while working with material that will start on fire easily.

Stop the engine before you fill the fuel tank.

If the engine is hot, use care when you fill the fuel tank.

Do not use gasoline or diesel fuel for cleaning parts. Use solvents that will not start on fire.

#### Battery Gas is Highly Flammable!



Do not check the battery charge by putting metal objects across the posts.

Keep sparks and flames away from batteries.

Do not smoke near battery.

#### Flame Is Not a Flashlight!

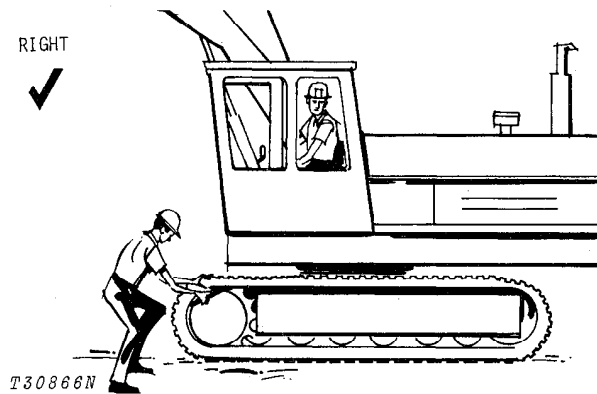
**DO NOT USE OPEN FLAME AROUND THE EXCAVATOR.**

**KNOW WHERE FIRE EXTINGUISHERS ARE KEPT!**

### UNDER ALL MAINTENANCE CONDITIONS -

Do not work on the equipment unless you are approved to do so. Then be sure you know the safe and correct procedure.

Do not work on equipment while it is being operated.



When the engine is running, avoid working on the excavator unless the procedure is approved.

If you must work on the excavator while the engine is running, USE TWO service technicians. One must be at the controls. The other must be within sight of the operator.

#### KEEP HANDS AWAY FROM MOVING PARTS.

Put a support under all raised equipment.

Do not work under a raised bucket.

Lower the bucket to the ground.

If the excavator is on a slope, use blocks to hold it in place.

Do not lift heavy parts by yourself. Use hoisting equipment for this.

#### TAKE CARE! WATCH OUT FOR OTHER PEOPLE IN THE AREA.

When you drill, grind, or hammer metal, wear safety glasses.

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