

# **690DR Excavator With All Terrain Wheeled Undercarriage**

## **OPERATORS MANUAL 690DR Excavator OMT124550 (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**

# OM

## **690DR Excavator With All Terrain Wheeled Undercarriage**

Deere & Company  
Moline, Illinois  
Contract DLA700-89-C-8012  
Excavator Wheel Mounted  
690D RRR  
S/N (531676- )  
T. O. No. 36C37-2-3-24

Deere & Co.  
Moline, Illinois 61265  
Contract: DLA 700-89-C-8012  
Excavator, Wheel Mounted  
Model 690DRRR  
Serial Number \_\_\_\_\_  
T.O. Number \_\_\_\_\_

### **OMT124550**



# Introduction

Read this manual carefully to learn how to operate and service your machine correctly.

## SAFETY

**CAUTION:** This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

## DIRECTIONS

Left, right, front, and rear in this manual are seen from the operator's seat facing forward, stabilizers at the rear.

## MEASUREMENTS

U.S. customary measurements are shown with SI metric equivalents immediately following in parenthesis.

Some hardware is metric. Specified metric hardware must be used for replacement.

**CAUTION:** Use only metric tools for metric hardware. Other tools may not fit properly. They may slip and cause injury.

## WARRANTY

The warranty on this machine appears on your copy of the purchase order which you should have received from your dealer when making your purchase. This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty.

Warranty and field improvements are a part of John Deere's product support program for customers who operate and maintain their equipment as described in this manual. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

## MACHINE NUMBERS

Write your product identification number (PIN) and serial numbers on pages provided in Machine Numbers chapter. Your dealer needs this information when ordering parts.



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# Safety

## RECOGNIZE SAFETY INFORMATION

This is the 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.



O53.ALERT -19-16JUN87

-JUN-07DEC88

TS1369

## UNDERSTAND AND SIGNAL WORDS

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

Safety signs with signal word DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

**▲ DANGER**

**▲ WARNING**

**▲ CAUTION**

O53.SIGNAL -19-07OCT85

-19-30SEP86

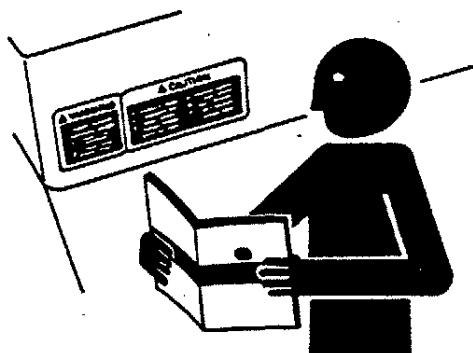
TS187

## FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



O53.READ -19-23APR87

-JUN-23AUG88

TS201



## INSPECT MACHINE

Inspect your machine carefully each day by walking around it before you start it. (See Pre-Start Inspection Chapter.)



T82.BHSA.CL -19-06.JAN88

T8607A0 -JUN-18OCT89

## USE HANDHOLDS AND STEPS

Falling is one of the major causes of personal injury.

When you get on and off the machine, always maintain a three point contact with the steps and handrails and face the machine. Do not use any controls as handholds.

Never jump either on or off the machine. Never mount or dismount a moving machine.

Be careful of slippery conditions on platforms, steps, and handrails when leaving the machine.



O2T.05.K89 -19-18.JAN89

T8601AN -JUN-15.JUN89

## START ENGINE FROM OPERATOR'S SEAT

Avoid possible injury or machine damage. Do not start engine by shorting across starter terminals.

**NEVER** start engine while standing on ground. Start engine only from operator's seat.

T82.EXSA.V -19-12.NOV87





## OPERATE EXCAVATOR SAFELY

Always walk around the excavator before starting and moving it. Keep bystanders clear of excavator, especially before moving boom, swinging upperstructure, or traveling. Always be alert for bystanders in or near the excavation.

When lifting pipe, etc., with the excavator, keep all people away from raised load.

When digging deep, avoid hitting bottom of boom or bucket cylinder hoses against the ground. Avoid hitting blade with boom.

Avoid digging into machine with bucket teeth.

Use bucket only for digging. Do not use it as a jack hammer or wrecking ball.

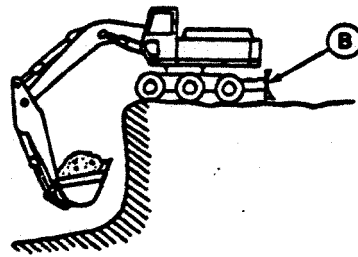
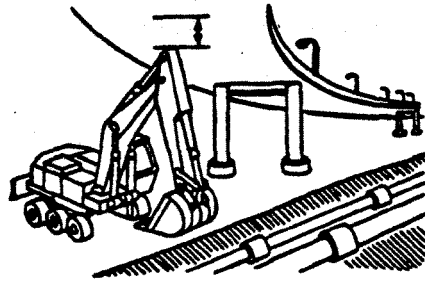
Avoid contact between boom or arm and overhead obstacles when you operate, move, or haul excavator.

Check the location of cables, gas lines, and water mains before digging.

Do not dig under any part of the machine.

Make sure work site footing has sufficient strength to firmly support the machine. When working close to an excavation, position machine with dozer blade (B) at the rear. Never move the machine with the bucket cut into the ground or dig by using the machine weight.

Never leave the operator's seat without first placing the pilot control shut-off lever in the locked position.

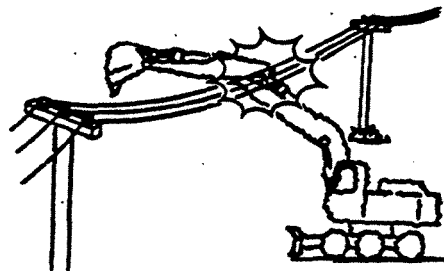


/T7084GM /T7084GN 111089

## AVOID POWER LINES

Serious injury or death can result from contact with electric lines.

Never move any part of the machine or load closer to electric line than (10 ft) 3 m plus twice the line insulator length. Use a signal person to guide operator. Use shrouds or insulators as necessary.



/T7084HA 111089

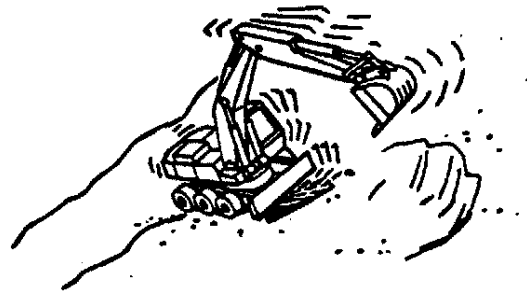


## AVOID TIPPING

When operating on a slope, keep bucket low to ground and close to machine. Wheels should be pointed uphill.

Avoid tipping the excavator when swinging heavy loads. Reduce swing speed as necessary. See lift charts in Specifications chapter.

When parking on a slope, place wedges against wheels.



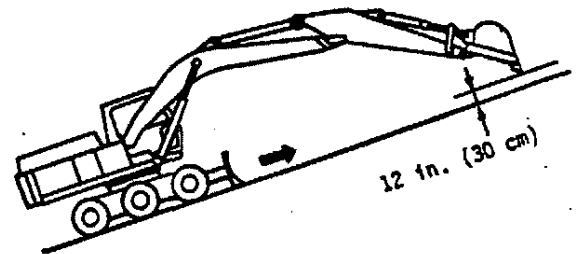
77084GO 111089

## DRIVE EXCAVATOR SAFELY

Dozer blade is at front of the machine. Before moving excavator, find out which way to move propel pedals for the direction you want to go. Pushing down front of both propel pedals moves the machine forward.

Keep the bucket on the uphill side, approximately 12 in. (30 CM) above the ground, when ascending or descending slopes. \*If machine starts to slip or become unstable, lower the bucket immediately.

\*Avoid moving the machine with the alignment of the wheels at an angle to the direction of the slope of the hill.

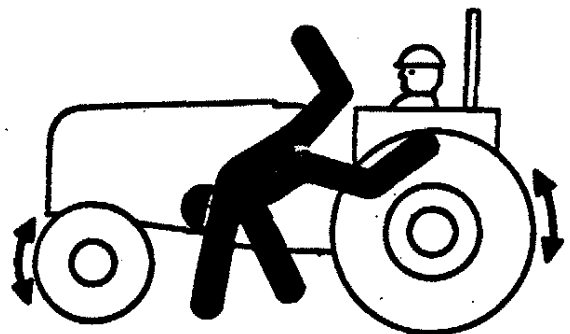


77084GP 111089

## KEEP RIDERS OFF MACHINE

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.



O63 RIDER -19-03MAY88

TS280  
-JUN-22/AUG88



## HANDLE FUEL SAFELY—AVOID FIRES

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease and debris. Always clean up spilled fuel.



O53,FIRE1 -19-23APR87

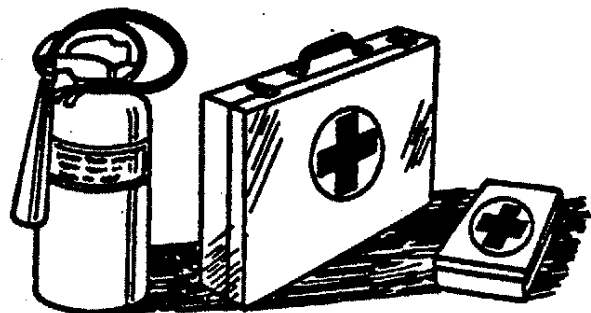
T8202 -JUN-23AUG88

## PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



O53,FIRE2 -19-03MAR86

T8201 -JUN-23AUG88

## HANDLE STARTING FLUID SAFELY

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.



O53,FIRE3 -19-27OCT87

T8099AU -JUN-23MARR88

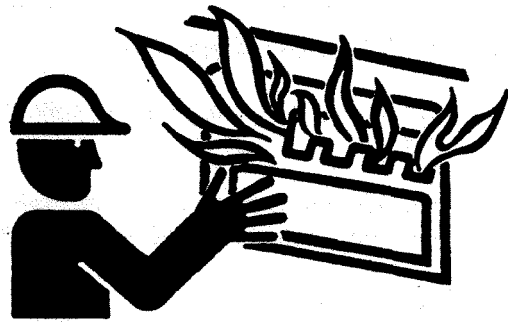


### CLEAN TRASH FROM MACHINE

Keep engine compartment, radiator, batteries, hydraulic lines, fuel tank, and operator's station clean.

Temperature in engine compartment may go up immediately after engine is stopped. **BE ON GUARD FOR FIRES DURING THIS PERIOD.**

Open access door(s) to cool the engine faster, and clean engine compartment.

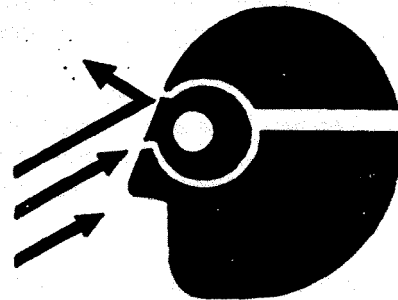


O2T.05.J33 -19-17NOV87

T6689AG -UN-18OCT88

### PROTECT AGAINST FLYING DEBRIS

When you drive connecting pins in or out, guard against injury from flying pieces of metal or debris; wear goggles or safety glasses.

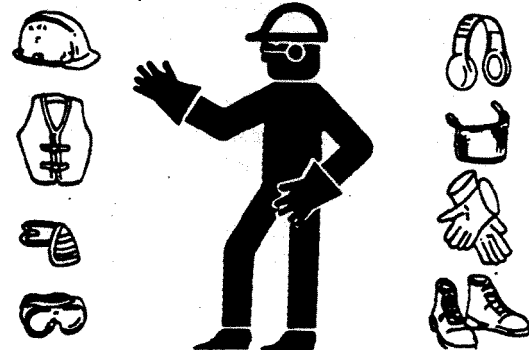


O2T.05.J45 -19-18JAN88

T6642DK -UN-18OCT88

### WEAR PROTECTIVE CLOTHING

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



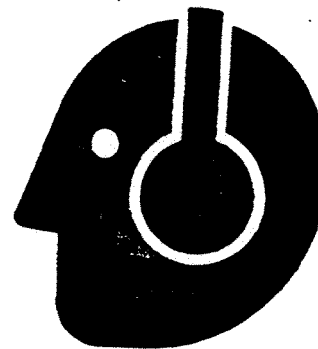
O53.WEAR2 -19-23APR87

TS206 -UN-23AUG88

### PROTECT AGAINST NOISE

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.



O53.NOISE -19-23APR87

TS207 -UN-23AUG88



## PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate or service machine while it is moving. Keep hands, feet and clothing from power-driven parts.

Before servicing machine.

- Park machine on level ground.
- Lower bucket to the ground.
- Turn auto idle switch off.

**IMPORTANT** Turbocharger may be damaged if engine is not properly shut down.

- Run engine at half speed without load for two minutes.
- Move the speed control lever all the way forward.
- Turn key switch to OFF. Remove key from switch.
- Move pilot control shutoff lever to locked position.
- Allow engine to cool.

If maintenance procedure must be performed with engine running, do not leave machine unattended.

Securely support any machine elements that must be raised for service work. Never work under a machine raised by the boom. If the machine must be raised, keep a 90-100° angle between boom and arm.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.



-JUN-23AUG08

TS216

TX,FF,7

-19-14DEC88

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