

*DOUG BODE*

36C37-2-3-11



**John Deere  
690C  
Excavator With  
All Terrain  
Wheeled Undercarriage**

Contract: F09603-84-C-1060  
John Deere, Moline, Illinois 61265  
John Deere Model 690C Excavator with  
all terrain wheeled undercarriage  
U.S. Air Force

**John Deere Davenport Works  
OM-T114473 Issue H7**



Litho in U.S.A.

# 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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## 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.



AB6;T81389 053;ALERT 160687

## UNDERSTAND SIGNAL WORDS

A 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.



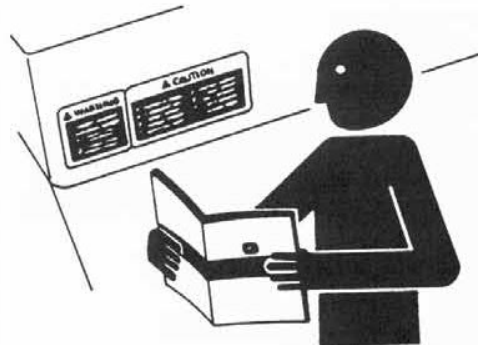
AB6;TS187 053;SIGNAL 071085

## 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.



AB6;TS201 053;READ 230487

## INSPECT MACHINE

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



018;T5813AN T82;BHSA CL. 180387

### USE HANDHOLDS AND STEPS

When you get on and off machine, always maintain a three point contact with steps and handrails and face 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 mounting or dismounting.



018;T6192AH 02T;;05-FF4 010487

### 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 030487

### **OPERATE EXCAVATOR SAFELY**

Always walk around the excavator before starting and moving it. Keep bystanders clear of excavator, especially before moving boom, swinging upper-structure, 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 contacting tires or machine frame with bucket teeth.

Never move the machine with the bucket cut into the ground or dig by using the machine weight.

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 the machine.

Make sure the work site footing has sufficient strength to firmly support the machine.

Stabilizers/blade must be set on a firm surface. Do not dig under stabilizers/blade. Be alert to possible machine movement when raising stabilizers/blade.

### **AVOID TIPPING**

When operating on a slope, keep bucket low to ground and close to machine.

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

When parking on a slope, place wedges against wheels.

### AVOID POWER LINES

Keep away from power lines. Serious injury or death may result. Never move any part of the machine or load closer to power line than 3 m (10 ft) plus twice the line insulator length.

02T;05 C1. 042887

### 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.

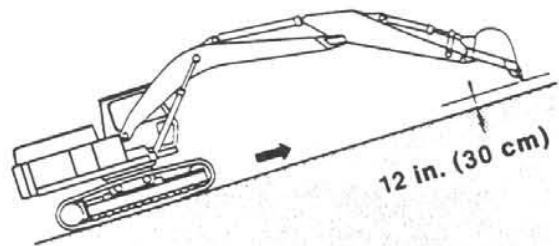


AB6;TS213 053;RIDER 160687

### DRIVE EXCAVATOR SAFELY

Before you move the excavator, find out which way to move propel pedals for the direction you want to go. If propel motors are in front of the cab, push down the rear of the propel pedals to move forward.

Be careful when turning on a slope; such turning may cause overturning or sideways slip. 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.



2TA;T5962AZ T82;EXSA BJ 250984

### 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.



AB6;TS202 053;FIRE1 230487

## 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.



AB6;TS186 053;FIRE2 080785

## 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.



AB6;T6098A U 053;FIRE3 160687

## 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.**

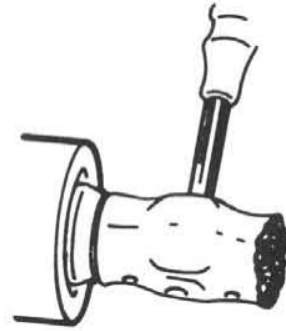
Open access door(s) to cool the engine faster.



018;T86512 T82;FLSA D. 300387

### PROTECT AGAINST FLYING DEBRIS

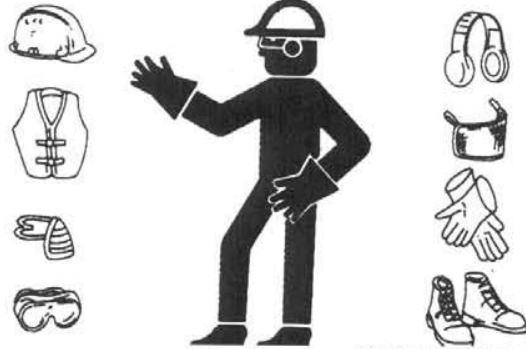
When you drive connecting pins in or out, guard against injury from flying pieces of metal or debris; wear goggles or safety glasses.



018;T6073AP T82;FLSA AB. 060487

### WEAR PROTECTIVE CLOTHING

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



AB6;TS206 053;WEAR2 230487

### 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.



AB6;TS207 053;NOISE 230487

## SERVICE EXCAVATOR SAFELY

Never operate the machine if an unsafe condition exists. Attach a "DO NOT OPERATE" tag to the machine or disconnect the battery ground cable (-) before working on or under the machine.

Be sure you understand a service procedure before working on the machine.

Never lubricate or work on the machine while it is moving.

Always use two people when making checks with the engine running—the operator at the controls, able to see the person doing the checking.

Keep hands away from moving parts.

Never work under the machine raised by the boom. If the machine must be raised, keep a 90—110° angle between boom and arm.

Support the machine in the raised position by placing blocks or jackstands under machine.

Do not work under a raised bucket. Lower bucket to ground or onto blocks.

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

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts.

## AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard to search for leaks.

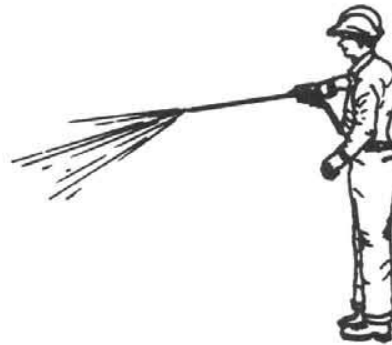
If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.



AB6;X9811 053;FLUID 010586

### CLEAN THE MACHINE REGULARLY

Remove any grease, oil or debris build-up to avoid possible injury or machine damage.



018;T5813AM T82;FLSA AC 130685

### SUPPORT RAISED EQUIPMENT

Do not work under a raised bucket. Lower the bucket to ground or onto blocks.

Do not work under a raised undercarriage.



2TA;T82343 T82;EXSA BE 240983

 **DANGER**

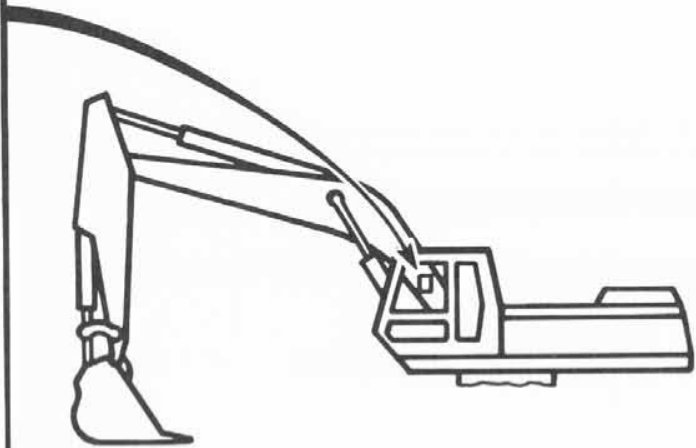


**AVOID DEATH OR SERIOUS INJURY FROM BOOM**

**NEVER** place any part of body beyond window frame. It could be crushed by the boom if boom control lever is accidentally bumped or otherwise engaged.

If window is missing or broken replace immediately.

s





**Suggest:**

**If the above button click is invalid.**

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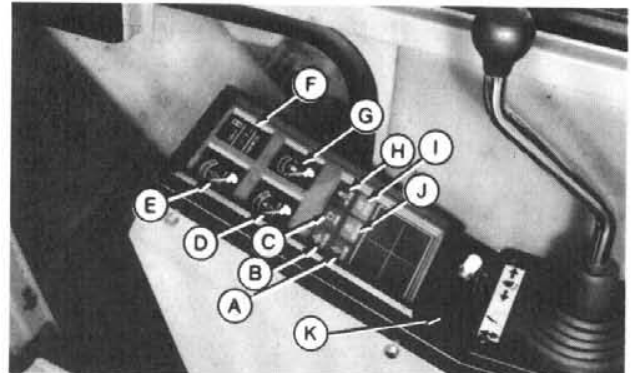
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# Operator's Station

## GAUGES AND INDICATORS

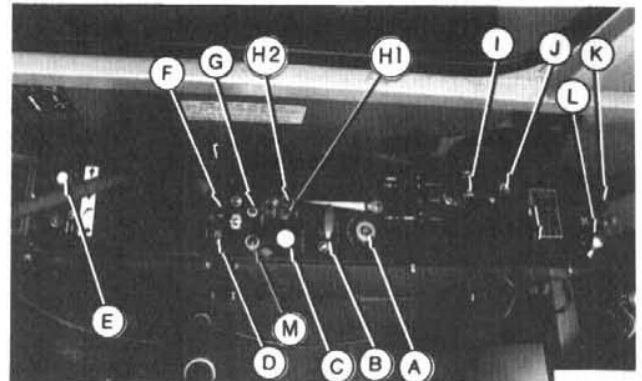
- |                              |                             |
|------------------------------|-----------------------------|
| A—Engine Coolant Temperature | F—Hourmeter                 |
| B—Engine Oil Pressure        | G—Fuel                      |
| C—Alternator Indicator       | H—Hydraulic Filter          |
| D—Hydraulic Oil Temperature  | I—Flow Divider              |
| E—Engine Coolant Temperature | J—Air Restriction Indicator |
|                              | K—House Lock Indicator      |



2TA;T5870BJ T82;EXOS AY 250984

## SWITCHES

- |                    |                       |
|--------------------|-----------------------|
| A—Key              | H1— Propol RANGE      |
| B—Engine Shut-Off  | H2— Propol SPEED      |
| C—Start Aid        | I — Flow Divider      |
| D—Windshield Wiper | J — Cigar Lighter     |
| E—Buzzer Stop      | K — Heat Control      |
| F—Work Lights      | L — Blower Control    |
| G—Swing Lock       | M — Windshield Washer |



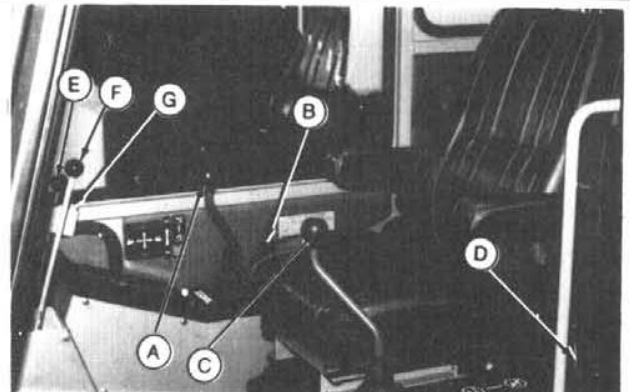
2TA;T5928FU T82;EXOS AZ 250984

## LEVERS

- A—Right Control\*
- B—Throttle
- C—Left Control\*\*
- D—Pilot Control Shut-Off/Emergency Brake
- E—Dozer Angle/Stabilizer Control
- F—Dozer Tilt/Dozer Elevate
- G—Dozer/Stabilizer Control

\*The horn button is located on the top of this knob.

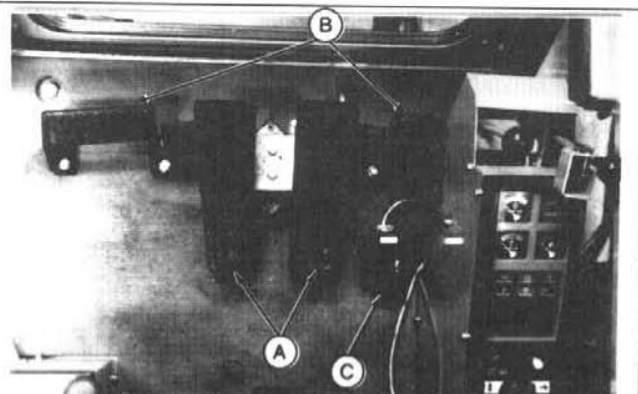
\*\*The momentary swing lock is located on the top of this knob.



2TA;T5886AG T82;EXOS BA 101084

## PEDALS

- A—Propel Pedals
- B—Footrests
- C—Attachment Control Pedal



2TA;T5863BA T82;EXOS BB 250984

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