

690E LC Excavator Repair

TECHNICAL MANUAL 690E LC Excavator Repair

TM1509 02JUL98 (ENGLISH)

For complete service information also see:

690E LC Excavator	
Operation and Tests	TM1508
6068 Engine (Serial No. —559602)	CTM8
6068 Engine (Serial No. 559603—)	CTM104
Alternators and Starting Motors	CTM77

**Worldwide Construction
And Forestry Division**
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Introduction

Foreword

This manual is written for an experienced technician. Essential tools required in performing certain service work are identified in this manual and are recommended for use.

Live with safety: Read the safety messages in the introduction of this manual and the cautions presented throughout the text of the manual.



This is the safety-alert symbol. When you see this symbol on the machine or in this manual, be alert to the potential for personal injury.

Technical manuals are divided in two parts: repair and operation and tests. Repair sections tell how to repair the components. Operation and tests sections help you identify the majority of routine failures quickly.

Information is organized in groups for the various components requiring service instruction. At the beginning of each group are summary listings of all applicable essential tools, service equipment and tools, other materials needed to do the job, service parts kits, specifications, wear tolerances, and torque values.

Technical Manuals are concise guides for specific machines. They are on-the-job guides containing only the vital information needed for diagnosis, analysis, testing, and repair.

Fundamental service information is available from other sources covering basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic type of failures and their causes.

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THANK YOU!

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Follow Safe Procedures

Unsafe work practices are dangerous. Understand service procedure before doing work; do not attempt shortcuts.



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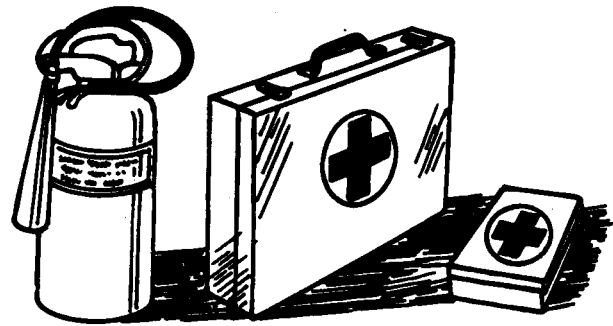
TX,05,FF1611 -19-14JUN90-1/1

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.



TS291 -UN-23AUG88

DX,FIRE2 -19-03MAR93-1/1

Prevent Acid Burns

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:

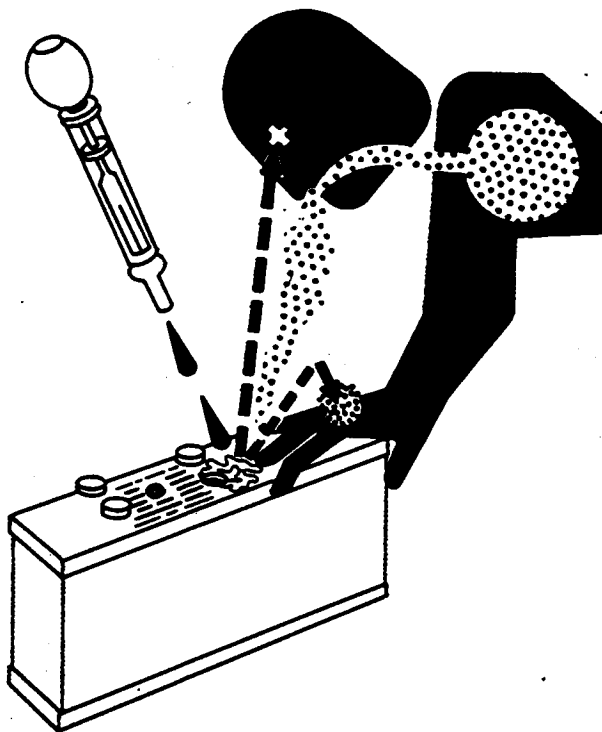
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

If you spill acid on yourself:

1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 15—30 minutes. Get medical attention immediately.

If acid is swallowed:

1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 quarts).
3. Get medical attention immediately.



TS203 -UN-23AUG88

DX,POISON -19-21APR93-1/1

Handle Chemical Products Safely

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include such items as lubricants, coolants, paints, and adhesives.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow procedures and recommended equipment.

(See your John Deere dealer for MSDS's on chemical products used with John Deere equipment.)



TS1132 -UN-26NOV90

DX,MSDS,NA -19-03MAR93-1/1

Handle Fluids 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.



TS202 -UN-23AUG88

TX,05,FF1622 -19-14JUN90-1/2

Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Do not store oily rags; they can ignite and burn spontaneously.



TS227 -UN-23AUG88

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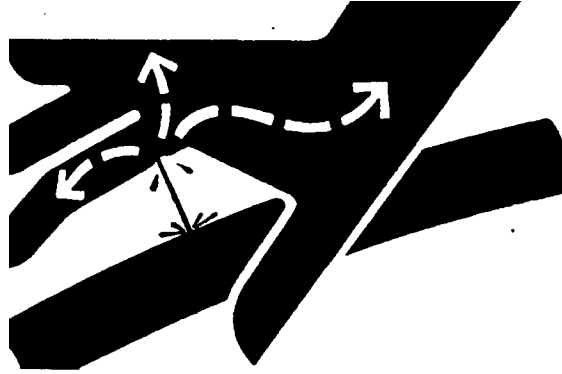
Avoid High-Pressure Fluids

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.



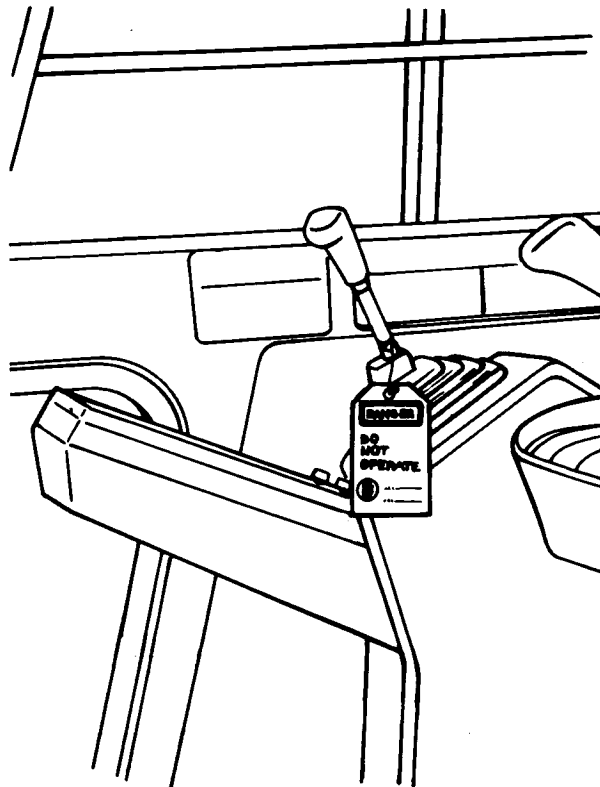
X9811 -UN-23AUG88

DX,FLUID -19-03MAR93-1/1

Warn Others of Service Work

Unexpected machine movement can cause serious injury.

Before performing any work on the machine, attach a "Do Not Operate" tag on the right control lever.



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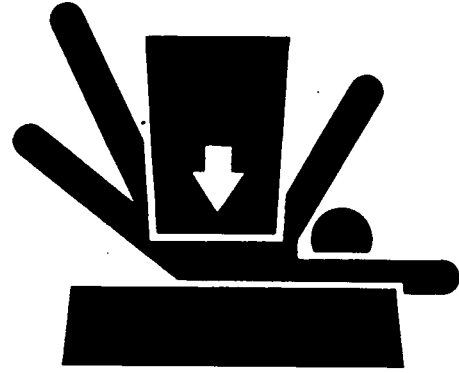
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Support Machine Properly

Always lower the attachment or implement to the ground before you work on the machine. If you must work on a lifted machine or attachment, securely support the machine or attachment. If left in a raised position, hydraulically supported devices can settle or leak down.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.

When implements or attachments are used with a tractor, always follow safety precautions listed in the implement operator's manual.



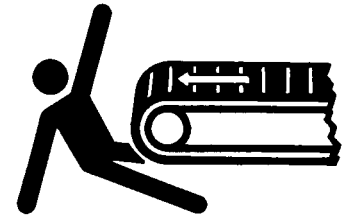
TS229 -JUN-23AUG88

DX,LOWER -19-17FEB99-1/1

Operate Only 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.



T6607AO -JUN-18OCT88

TX,05,FF1615 -19-14JUN90-1/1

Park Machine Safely

Before working on the machine:

- Park machine on a level surface.
- Lower bucket to the ground.
- Turn auto-idle switch off.
- Run engine in light duty "L" mode without load for 2 minutes.
- Set power mode to low idle "I" and turn key switch to OFF to stop engine. Remove key from switch.
- Pull pilot control shut-off lever to locked position.
- Allow engine to cool.

CED.OUTX782,582 -19-18AUG99-1/1

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