

690DR Excavator With All Terrain Wheeled Undercarriage

TECHNICAL MANUAL 690DR Excavator TM124557 (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**

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36C37-2-3-22

TMT

John Deere 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 _____

TMT124557



LITHO IN U.S.A.

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manual**

JustClickHere 

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**Have any questions please write to me:
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690DR EXCAVATOR TECHNICAL MANUAL TMT124557

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A John Deere ILLUSTRATION® Manual

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INTRODUCTION

This manual is part of a total service support program.

FOS Manuals—reference

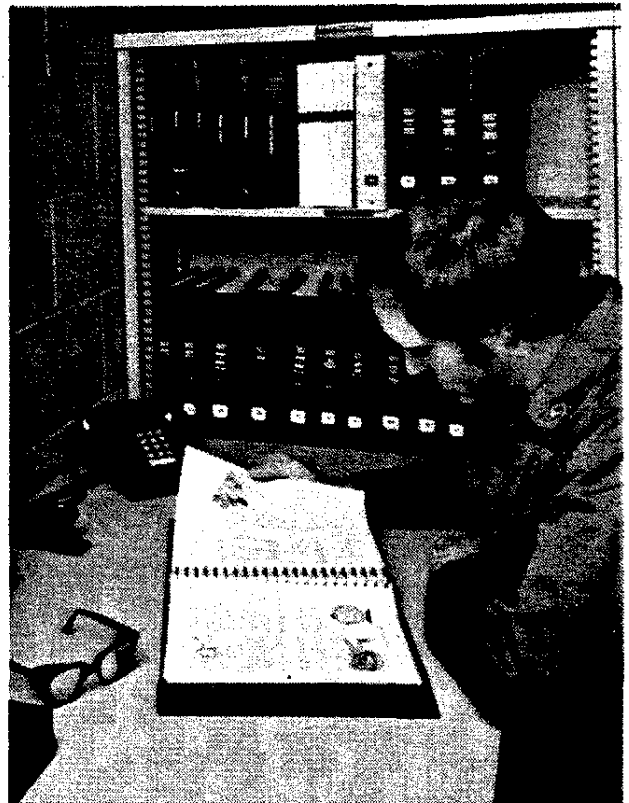
Technical Manuals—machine service

Component Manuals—component service

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

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.

Component Technical Manuals are concise service guides for specific components. Component technical manuals are written as stand alone manuals covering multiple machine applications.



AB6;RW5559 053;INTRO2 030765

FEATURES OF THIS TECHNICAL MANUAL

John Deere ILLUSTRATION format emphasizing illustrations and concise instructions in easy-to-use modules.

Emphasis on diagnosis, analysis, and testing so you can understand the problem and correct it.

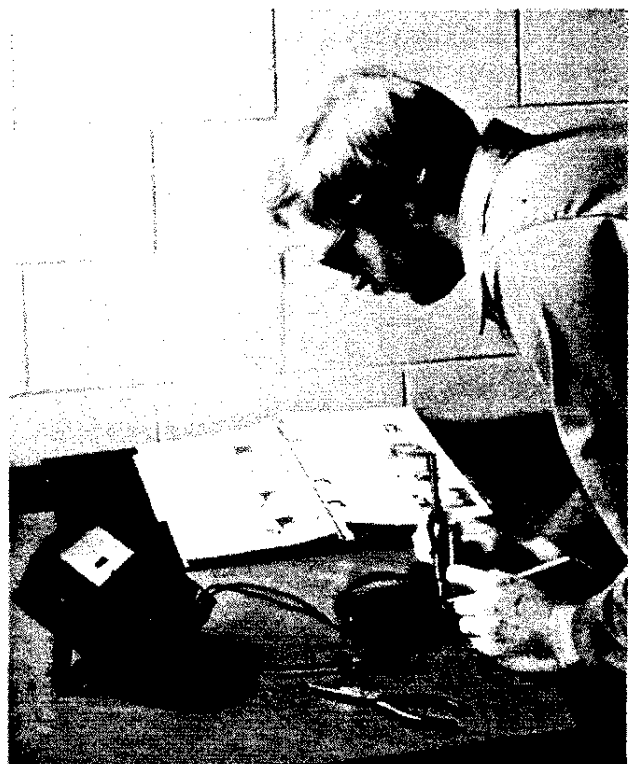
Diagnostic information presented with the most logical and easiest to isolate problems first to help you identify the majority of routine failures quickly.

Step-by-step instructions for teardown and assembly.

Summary listing at the beginning of each group of all applicable specifications, wear tolerances, torque values, essential tools, and materials needed to do the job.

An emphasis throughout on safety—so you do the job right without getting hurt.

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



AB6;RW5560 053;INTRO3 071085

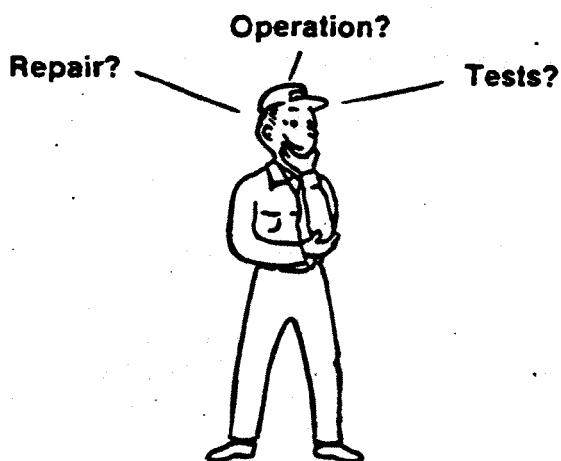
THREE-STEP PROCEDURE

Use the following three-step procedure to locate the desired information.

1. Determine the type of information you need. Is it repair, operation, or tests?
2. Go to the appropriate section tab:

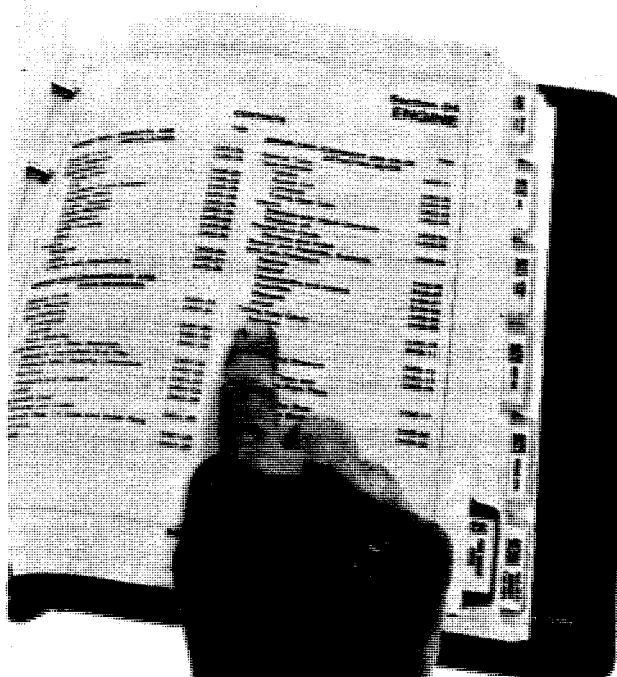
Gray for Repair

Yellow for Operation or Tests



018;T5940AT T82;FLPD L 260785

3. Use the table of contents on the first page of the section to locate the information.



018;T5940AT T82;FLPD M 260785

SAFETY AND YOU

This safety-alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

When you see this symbol on your machine or in your manual, be alert to the possibility of personal injury. Follow the instructions in the safety message.

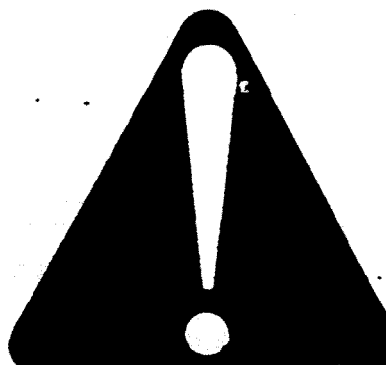


01R781389 T82:FLPD R 061126

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.



WARNING

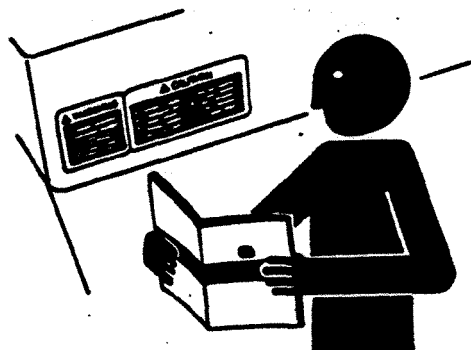
CAUTION

AB6:TS187 053:SIGNAL 071085

FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.



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.

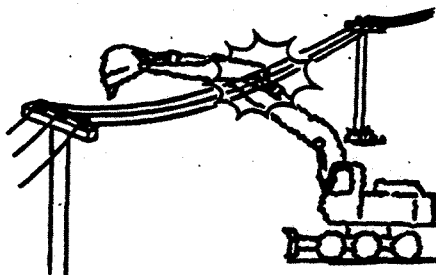
NEVER start engine while standing on ground. Start engine only from operator's seat.

T82;EXSA V 030487

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.



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.

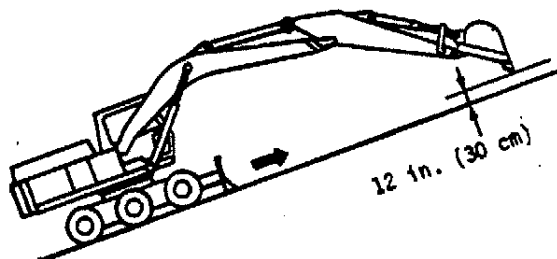


AB6;TS213 053;RIDER 160687

DRIVE EXCAVATOR SAFELY

Before moving excavator, find out which way to move propel pedals for the direction you want to go. Pushing down front of the propel pedals moves the machine towards the idlers.

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.

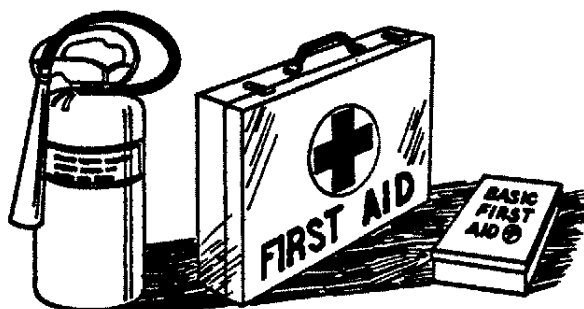


PREPARE FOR EMERGENCIES

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

Introduction and Safety Information

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

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:T6096A U 053;FIRE3 160687

PREVENT BATTERY EXPLOSIONS

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) clamp first and replace it last.

Do not charge a battery if the battery is frozen as it may explode. Warm battery to 60°F (16°C).

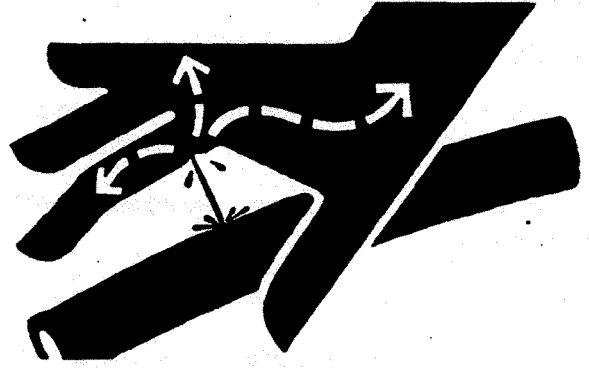


AB6:TS181 02T:05 C78 030287

AVOID HIGH-PRESSURE FLUIDS

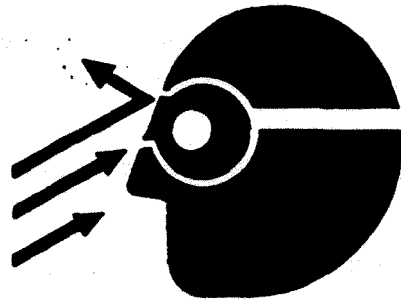
Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before unhooking hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard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



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.

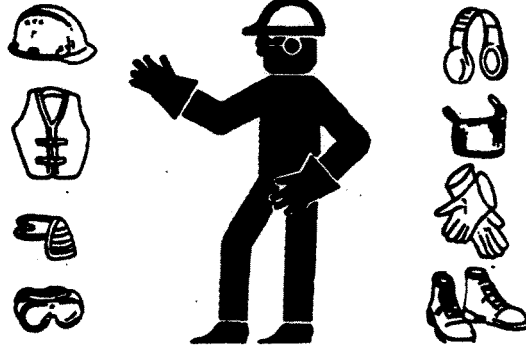


02T,05,145 -19-19JAN88

T8642DK -JN-19OCT86

WEAR PROTECTIVE CLOTHING

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



063,WEAR2 -19-23APR87

T8206 -JN-23AUG86

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.



063,NOISE -19-23APR87

T8207 -JN-23AUG86

SERVICE EXCAVATOR SAFELY

Never operate the machine if an unsafe condition exists. Attach a "DO NOT OPERATE" tag to 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 a 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.



DO NOT OPERATE

! **DANGER**

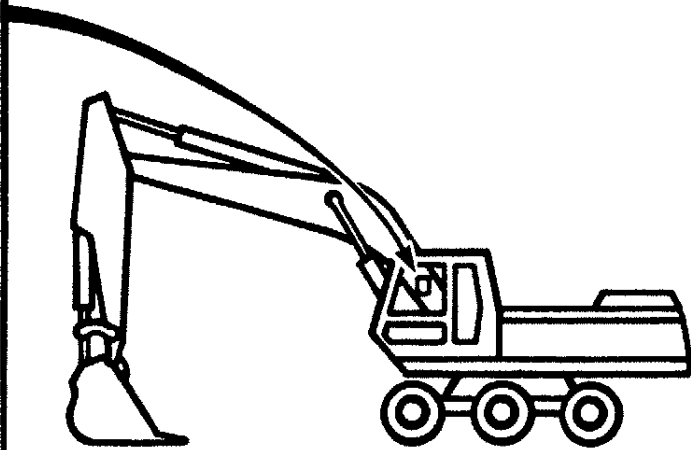


AVOID DEATH OR SERIOUS INJURY FROM BOOM

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.

5



! **DANGER**

EXPLOSIVE GASES

Cigarettes, flames or sparks could cause battery to explode. Always shield eyes and face from battery. Do not charge or use booster cables or adjust post connections without proper instruction and training. Keep vent caps tight and level.

POISON

CAUSES SEVERE BURNS

Contains sulfuric acid. Avoid contact with skin, eyes or clothing. In event of accident, flush with water and call a physician immediately. Keep out of reach of children.



Introduction and Safety Information

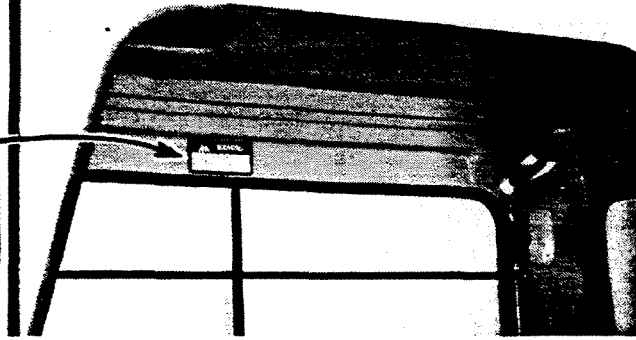


WARNING

**AVOID SERIOUS CRUSHING
INJURY FROM BOOM**

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

DO NOT remove window bars. If window is missing or broken, replace immediately.

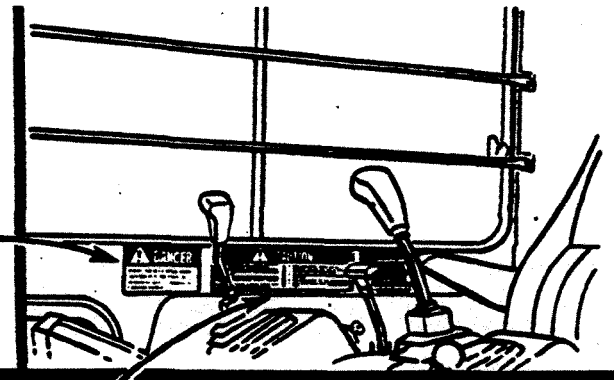


018;T6452AA 02T;05-FF1 060487



DANGER

Serious injury or death can result from contact with electric lines. Never move any part of unit or load closer to electric line than 10 feet plus twice the line insulator length.



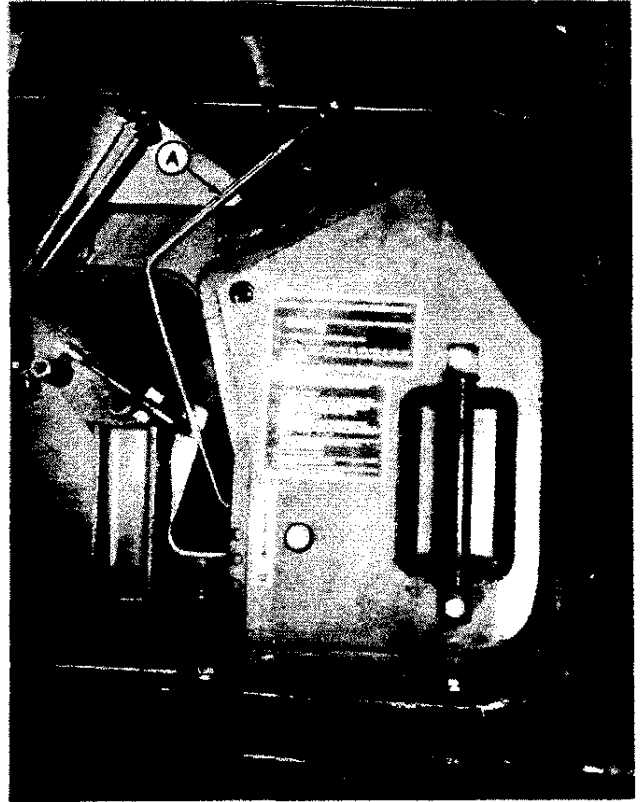
CAUTION

- **Avoid Death or Serious Injury** — Read and understand the Operator Manual and Safety Manual prior to operating this machine.
- **ALWAYS** lower bucket and blade to the ground and engage hydraulic control lockout lever before leaving operators compartment.
- Do not lift or carry loads that may cause machine tipping. Lift capacity may exceed machine stability.
- Avoid contact between boom/attachments and overhead obstacles whenever operating, traveling or transporting machine.

- **KEEP** bystanders clear of machine; especially before moving boom, or dozer blade, swinging upperstructure or traveling.
- Before moving machine, determine which way to press travel pedals (when dozer blade is in front of operator, toe pressure on pedals moves machine forward).
- Use caution to avoid tipping when swinging heavy loads to side of machine.
- Avoid parking machine on an incline.
- Relieve reservoir pressure before working on hydraulic system.

PREPARE MACHINE FOR REPAIR

1. Lower bucket and dozer blade to the ground.
2. Stop the engine.
3. Move control levers to release hydraulic pressure.
4. Pull the pilot control shut-off lever (A) rearward to lock-out the hydraulics.
5. Disconnect negative (-) battery cable.



BEFORE YOU WORK ON THE HYDRAULIC SYSTEM

Follow these steps before you work on any part of the hydraulic system:

1. Park the excavator on level ground.
2. Lower hydraulic pressure:
 - *Lower bucket and dozer blade to the ground.
 - *Stop engine.
 - *Move control levers until boom and bucket do not move.
3. Pull the pilot control shut-off lever back to position (A).

