

# **48 and 52-Inch Commercial Walk-Behind Mowers**

**John Deere Horicon Works  
OMM79611 Issue K8  
(This manual replaces OMM77681)**

LITHO IN U.S.A.  
ENGLISH

# Introduction

THANK YOU for purchasing a John Deere product.

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are U.S. customary units and their metric equivalents.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction of forward travel.

WRITE IDENTIFICATION NUMBERS in the Specifications section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when

you order parts. If this manual is kept on the machine, also file the identification numbers in a secure place off the machine.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate which you should have received from your dealer.

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. 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.



M61836  
-JUN-22DEC88

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*All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.*

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A John Deere ILLUSTRATION™ Manual

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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

T81389 -UN-07DEC68

## 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.



O53,SIGNAL -19-07OCT85

-19-30SEP88

TS187

## PROTECT CHILDREN

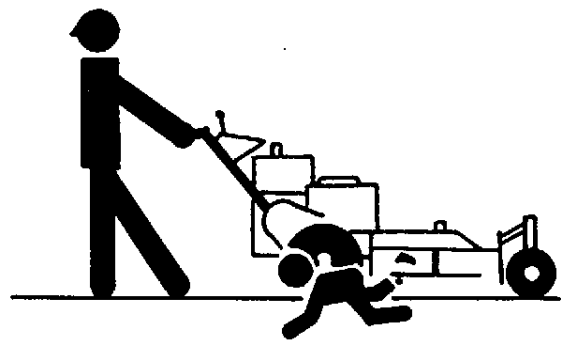
Keep children and others away when you use machine.

**BEFORE YOU BACK UP:**

- Stop mower.
- Look behind for children.

Do not let children use mower.

Never carry children. Do not let children ride on mower.



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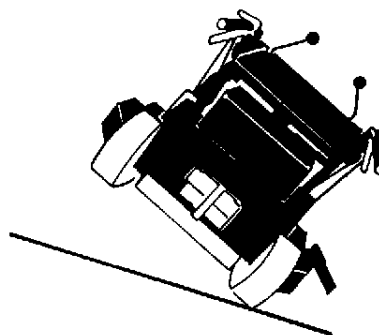
## AVOID TIPPING

Do not use riding attachment on slopes.

Avoid holes, rocks and roots.

Slow down before you turn.

Mow up and down slopes — not across. Avoid sudden starts and stops on slopes. Avoid parking on slopes.



MX,SACA,B -19-28OCT88

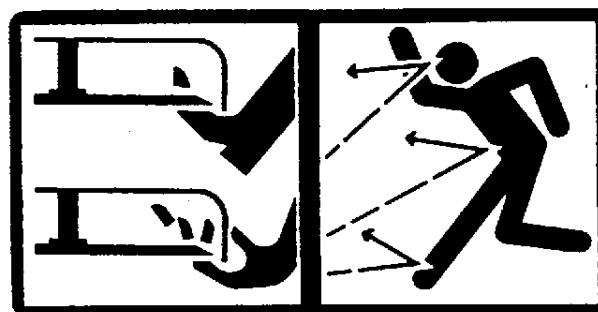
M61838 -UN-22DEC88

## AVOID ROTATING BLADES

Do not put hands or feet under mower when engine is running.

Before you mow, clear area of people. Pick up objects that may be thrown by blades. Keep guard and shield in place.

Stop engine before you adjust mower. Stop mower blades when you are not mowing grass.



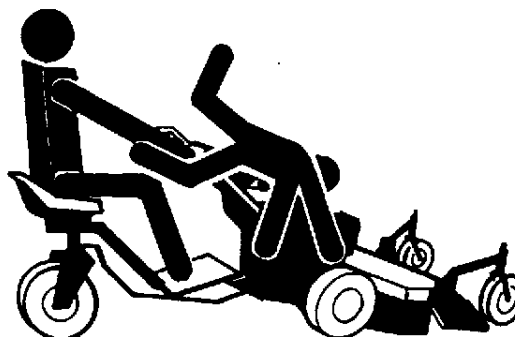
MX,SACA,C -19-28OCT88

IM41090 -UN-06SEP88

## 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.



MX,SACA,D -19-04NOV88

IM61839 -UN-22DEC88

## 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

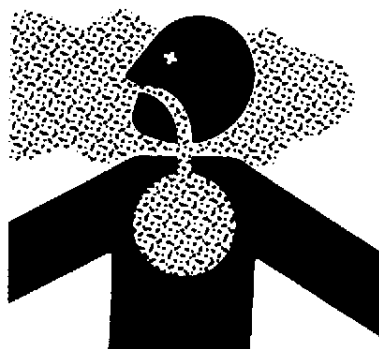
TS202 -UN-23AUG88



### WORK IN VENTILATED AREA

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.



O53,AIR -19-05JAN88

TS220 -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

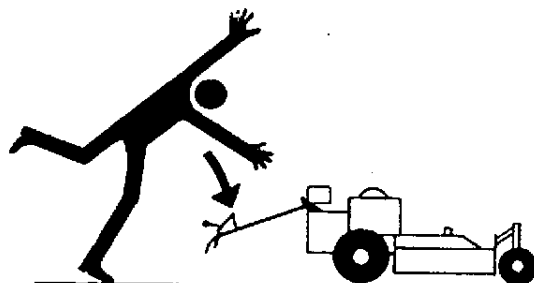
### INSPECT MOWER

Check hardware: tighten or replace as needed.

Replace worn or damaged parts.

Clean grass and oil build-up from mower and engine.

Keep side chute, mulching plate or bagging attachment in place.



MX,SACA,E -19-04NOV88

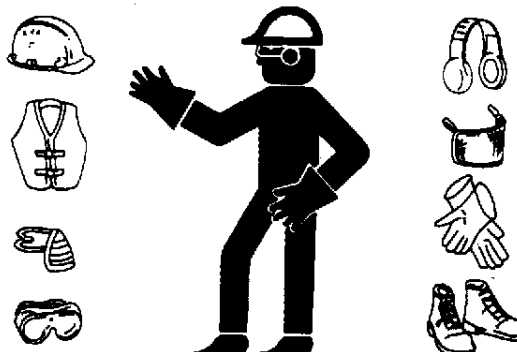
IM41863 -UN-22DEC88

### WEAR PROTECTIVE CLOTHING

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

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,WEAR -19-23APR87

TS206 -UN-23AUG88



## AVOID ACID BURNS

**CAUTION:** 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:

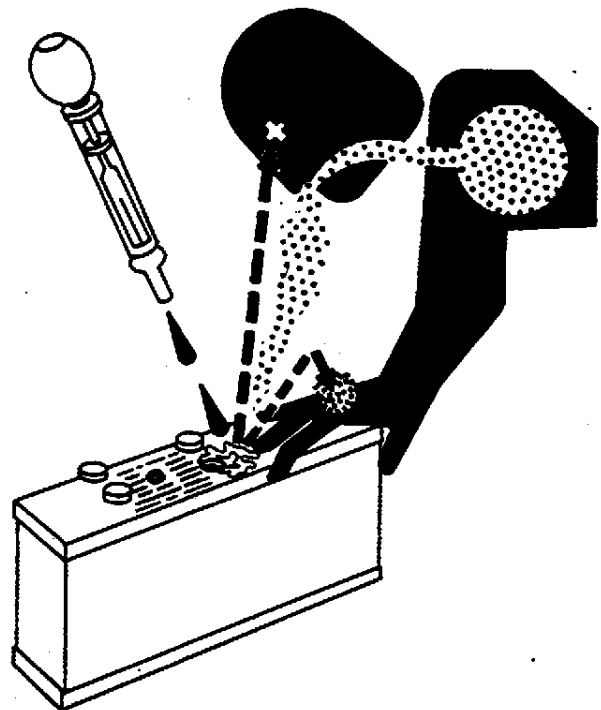
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

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 10—15 minutes. Get medical attention immediately.

If acid is swallowed:

1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



TSS203 -UN-23AUG88

MX,SACA,F -19-26OCT88

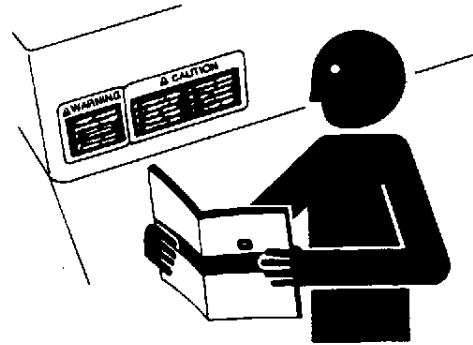


## FOLLOW SAFETY INSTRUCTIONS

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

TS201 -UN-23AUG68

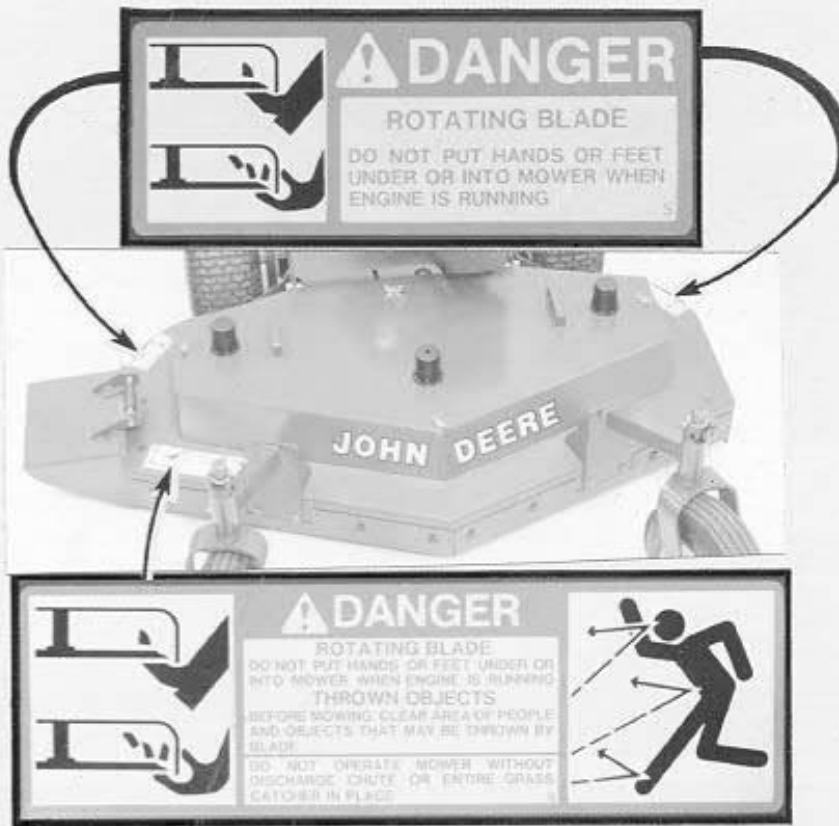
## READ SAFETY SIGNS



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M61840 -19-13MAR89

M61841 -19-13MAR89



M61842 -19-13MAR89



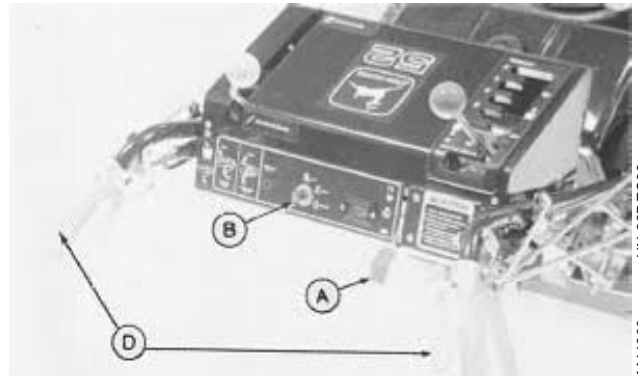
M61843 -19-13MAR89

MX,SACA,H -19-28OCT88

# Controls

## ENGINE CONTROLS

- A—Throttle Lever
- B—Ignition Switch
- C—Recoil Starter Handle
- D—Operator Presence Lever



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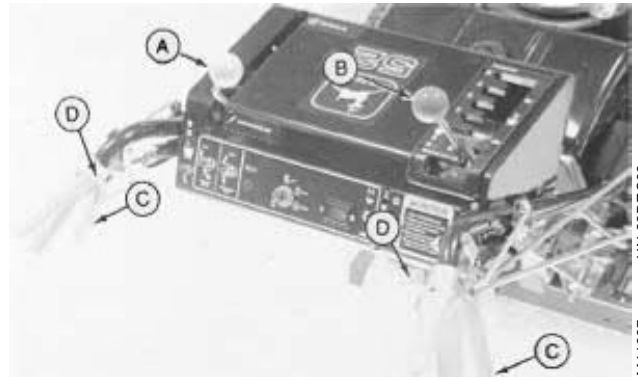


M41493 -UN-22DEC88

MX,CTCA,A -19-31OCT88

## BLADE AND TRACTION CONTROLS

- A—Blade Control Lever
- B—Travel Speed Control Lever
- C—Traction Control Levers
- D—Traction Neutral Locks

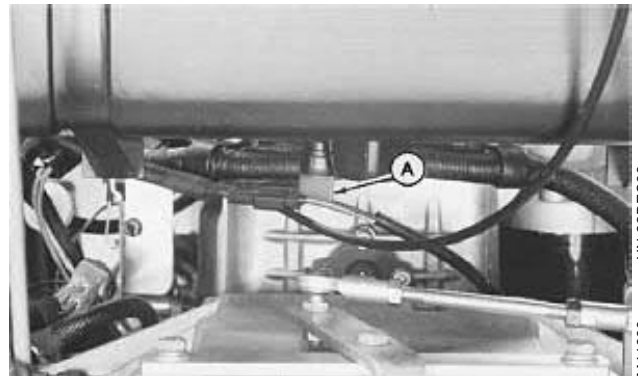


M41867 -UN-22DEC88

MX,CTCA,B -19-31OCT88

## FUEL SHUT-OFF VALVE

**IMPORTANT:** Avoid damage to engine, keep area below fuel shut-off valve (A) clean.



M41868 -UN-22DEC88

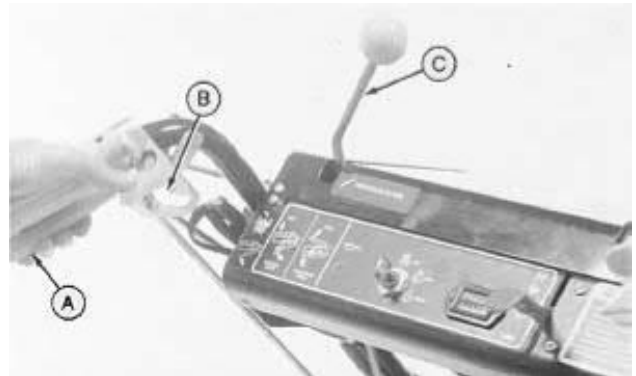
MX,CTCA,C -19-31OCT88

# Operating Mower

## STARTING ENGINE

**CAUTION:** Avoid suffocation from exhaust fumes. Start engine outside or in well ventilated area.

1. Open fuel shut-off valve.
2. Move traction control levers (A) to BRAKE position.
3. Put levers (B) in LOCKED position.
4. Put blade control lever (C) in DISENGAGE position.
5. Put transmission in NEUTRAL position.



MX.OPCA,A -19-31OCT88

6. Put throttle lever (A) fully forward to CHOKE position.
7. Turn key (B) to RUN position.

**IMPORTANT:** Avoid damage to starter rope or spring. Do not jerk starter handle or allow it to snap back.

8. MANUAL START: Pull recoil starter handle (C) until you hear engine fire.
9. ELECTRIC START: Turn key to START position and hold it until you hear engine fire. Release key.
10. Put throttle lever (A) at FAST position.

**IMPORTANT:** Avoid damage to engine in mower with less than 5 hours of use by following BREAK-IN procedure in Service section.



MX.OPCA,B -19-31OCT88

## STOPPING ENGINE

- CAUTION:** Avoid injury from contacting blade when you stop engine:
- Lock traction control lever in **NEUTRAL** position.
  - Put blade control lever at **DISENGAGE** position.

1. Put throttle lever (A) at SLOW position.
2. Turn key (B) to OFF position.



M41870 -UN-22DEC88

MX,OPCA,C -19-09NOV88

## SETTING TRAVEL SPEED

- CAUTION:** Avoid injury from machine run-away:
- Start engine. See **STARTING ENGINE** in this section.
  - Start mowing at slow ground speed.
  - Slowly put travel speed control lever to desired speed.

1. Start engine. See **STARTING ENGINE** in this section.
2. Engage transmission with travel speed control lever.
3. Release traction locks.
4. Put travel speed control lever at desired gear (shift-on-the-go).



M41871 -UN-22DEC88

Speed Selector Position	Travel Speed
R .....	up to 1.9 mph (3 Km/h)
1 .....	1.6 mph (2.5 Km/h)
2 .....	2.5 mph (4 Km/h)
3 .....	3.8 mph (6 Km/h)
4 .....	4.9 mph (7.8 Km/h)
5 .....	6.2 mph (9.9 Km/h)

MX,OPCA,D -19-09NOV88

## ENGAGING BLADES

1. Start engine. See STARTING ENGINE in this section
2. Put throttle lever at one-third position.
3. Hold operator presence lever against handle.
4. Put blade engagement lever forward to ENGAGE BLADE position (A).
5. Put throttle lever at FAST position.



MX,OPCA,E -19-09NOV88

M41872 -UN-22DEC88

## DISENGAGING BLADES

1. Put throttle lever at one-third position.
2. Put blade engagement lever rearward to DISENGAGE BLADE position (B).

*NOTE: Engine will stop if operator presence levers are not held down while blades are engaged.*



MX,OPCA,F -19-31OCT88

M41872 -UN-22DEC88

## STOPPING MOWER

Hold traction control levers against hand grips.



MX,OPCA,G -19-31OCT88

M41873 -UN-22DEC88

## EMERGENCY STOPPING

**⚠ CAUTION:** Stopping quickly on slopes may cause mower to tip over. Avoid injury by not making quick stops on slopes.

Release traction control levers to stop engine.



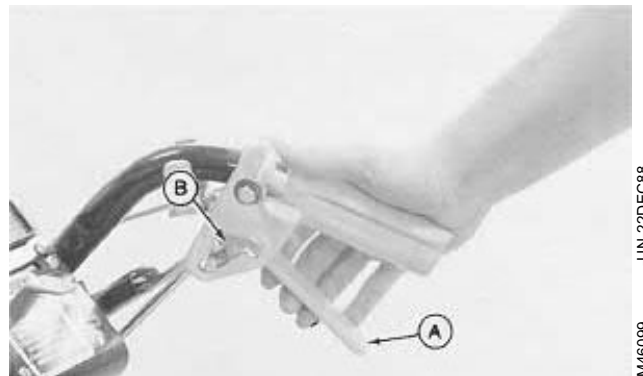
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M41874 -UN-22DEC88

## PARKING MOWER

**⚠ CAUTION:** Avoid injury when you park mower:  
—Park mower on level ground.  
—Stop engine.

1. Stop engine.
2. Put speed control lever in 1st Gear.
3. Hold each traction control lever (A) against hand grip.
4. Release each traction lever lock (B) and let traction control lever move to fully engaged position.



MX,OPCA,I -19-31OCT88

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## TURNING MOWER

Position A—Wheel fully ENGAGED,

Position B—NEUTRAL position.

Position C—BRAKE drive wheel.

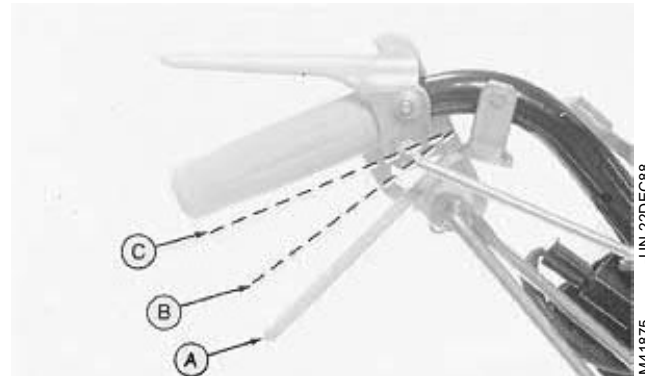
### GRADUAL LEFT TURN:

1. Release right control lever (A).
2. Hold left lever (B) in NEUTRAL position.

### TIGHT LEFT TURN:

1. Release right lever (A).
2. Hold left lever (B) against hand grip (BRAKE position).

RIGHT TURN: Operate levers opposite to LEFT TURN procedure.



M41875 -UN-22DEC88

MX.OPCA,J -19-31OCT88

## MOWING AND TURNING ON SLOPES

**⚠ CAUTION: Using rider attachment may cause mower to tip over when you mow on slopes. Remove rider attachment when you mow on slopes.**

1. Start to mow from bottom of slope.
2. When you mow on slope, squeeze traction control lever on UPHILL SIDE. (This helps prevent mower from slipping downhill.)
3. When you turn on slopes, always turn toward UPHILL SIDE.

MX.OPCA,K -19-31OCT88



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## ADJUSTING CUTTING HEIGHT

1. Use chart to determine correct settings for your desired cutting height.

CUTTING HEIGHT	MOWER DECK BOLT SETTING*	FRONT WHEEL SHIM LOCATION**	FRONT WHEEL SPACER LOCATION***
2-3/4 to 4 in. (70 to 105 mm)	TOP	TOP	3 ON BOTTOM
1-1/2 to 2-3/4 in. (40 to 70 mm)	MIDDLE	TOP	3 ON TOP
7/8 to 1-7/8 in. (22 to 45 mm)	BOTTOM	BOTTOM	3 ON TOP

\*See Step 2.

\*\*See Step 3.

\*\*\*See Step 4.

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