

14PZ and 14SZ 21-Inch Walk-Behind Rotary Mowers (Serial No. 010001)



JOHN DEERE

OPERATORS MANUAL

14PZ and 14SZ 21-Inch Walk-Behind Rotary
Mowers (Serial No. 010001)

OMM95319 Issue H2 English

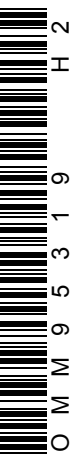
John Deere Horicon Works
OMM95319 Issue H2

(This manual replaces OMM95319 L0.)

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Introduction

THANK YOU for purchasing a John Deere product.

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

RIGHT AND LEFT SIDES are determined by facing the direction of forward travel.

DEALER NAME _____

PHONE NUMBER _____

DATE OF PURCHASE _____

WARRANTY IS EXPLAINED on the warranty certificate you received from your dealer. Please read it.

WRITE MACHINE NUMBERS BELOW. You need these numbers to help you order parts and to help trace the mower if it is stolen. Also record these numbers in a safe place in case the manual is lost.

• A—Mower Model _____

• B—Mower Number _____

• C—Engine Number _____



SERVICE SCHEDULE

Before Use: Check oil level.

First 5 Hours: Change engine oil.

25 Hours:

- Clean air cleaner element.
- Tighten blade bolt.
- Lubricate rear axle bushings.
- Clean & gap spark plug.
- Clean 14SZ belt area.
- Change engine oil.

250 Hours: Have John Deere dealer check flywheel brake liner.

AS NECESSARY

- Adjust 14SZ traction cable.
- Clean fins.
- Adjust throttle cable.
- Adjust slow idle.
- Check, remove, & sharpen blade.
- Balance & install blade.
- Clean fuel cap vents.

PART NUMBERS are subject to change without notice, & may be different outside the U.S.A.

- Air cleaner element: AM116236
- Belt: M77167
- Standard blade: M111453
- Mulching blade: M112972
- Spark plug: Champion RCJ8

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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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Safety

READ SAFETY SIGNS & INSTRUCTIONS



This symbol means **BE ALERT FOR POSSIBLE INJURY.**

DANGER points out immediate hazards which will cause severe injury or death.

WARNING points out hazards or unsafe practices which could cause severe injury or death.

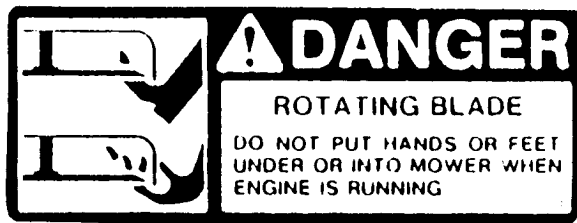
CAUTION points out hazards or unsafe practices which could cause minor injury or machine or property damage.

KEEP SAFETY SIGNS in good condition. You can order safety signs from your John Deere dealer.

READ THIS MANUAL CAREFULLY. Be thoroughly familiar with controls and proper use of equipment.

ALLOW ONLY RESPONSIBLE ADULTS, who understand instructions, to operate the machine.

IF YOU DON'T UNDERSTAND any part of this manual, see your John Deere dealer.



M73170 -19-23FEB90

Left Side of Deck



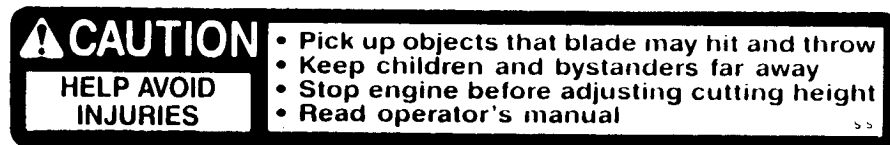
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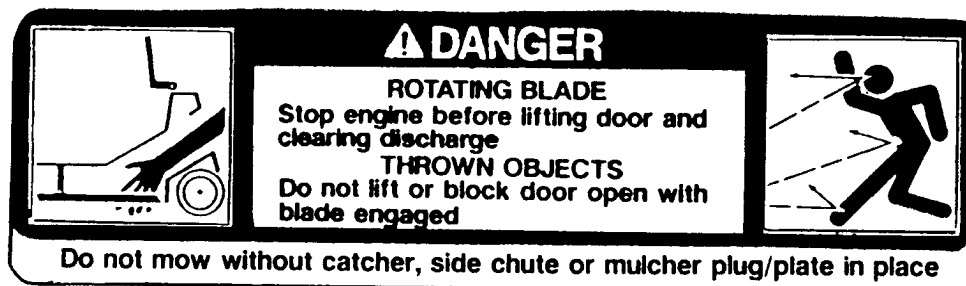
Right Side of Deck

M73149

-19-23FEB90



Top, Rear of Engine



-19-02JAN91

M73467

Rear of Door

MX,SAFW,A

-19-14JUL92



PREPARE BEFORE YOU OPERATE

Check hardware often, especially blade and engine mounting bolts. Keep them tight.

Discharge chute, grass bag, or mulch plug must be in good condition, held in place by door.

To help prevent fires, keep engine clean, especially cooling fins. Replace faulty muffler.

Wear close-fitting clothing, substantial footwear—not barefoot or sandals—and long trousers.

Protect eyes with shield, safety glasses, or goggles.

Protect ears with earplugs or ear muffs.

Focus on mowing. Don't wear headphones.

Be prepared for fire. Keep fire extinguisher and first aid kit handy. Keep medical and fire department emergency numbers near telephone.

MX,SAFW,C -19-14JUL92

PROTECT AGAINST THROWN OBJECTS

Don't mow when people are in mowing area.

Before you mow, clear area of objects that might be thrown by blade: sticks, rocks, bones, wire, etc.

Discharge clippings away from people.

Don't lift or block discharge door open when blade is ENGAGED.



MX,SAFW,D -19-14JUL92

M41423 -UN-30AUG88

PROTECT CHILDREN

KEEP CHILDREN IN HOUSE WHILE YOU MOW. If children come into mowing area, STOP MOWER. Move children to a safe place. Also keep other people and pets out of mowing area.

Don't let children or untrained persons operate mower.

Don't leave mower unattended with engine running.



MX,SAFW,E -19-14JUL92

M61473 -UN-01SEP88



OPERATE MOWER SAFELY

Don't use mower for anything but mowing.

Mow only dry grass.

WALK when you mow. Don't run. Keep firm hold on handle.

Mow across a slope, not up and down. Don't mow a steep slope where you can't maintain firm footing and control of mower.

Don't tilt mower or pick it up with engine running.

Don't leave mower on a slope. Put it on level surface.

Mow in daylight or good artificial light.

Stay alert for holes and hidden hazards.

Be sure of footing. Use great care when you pull mower backwards with engine running.

Be especially careful when you change direction on slope.

If mower starts to vibrate abnormally, STOP engine and fix problem. Vibration is usually a sign of trouble.

STOP engine before you leave, clean, or inspect mower.

Let engine cool and clean debris from mower before you store it indoors.

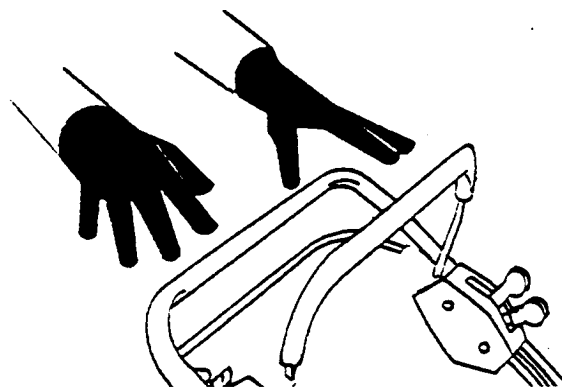
If you hit an object, stop mower. Fix damage before you operate.

MX,SAFW,F -19-14JUL92

EMERGENCY STOP

Release lever and handle:

- Mower will stop.
- Blade will stop.
- Engine will stop.



MX,SAFW,G -19-14JUL92

M73293 -UN-18SEP90



AVOID INJURY FROM MOVING PARTS

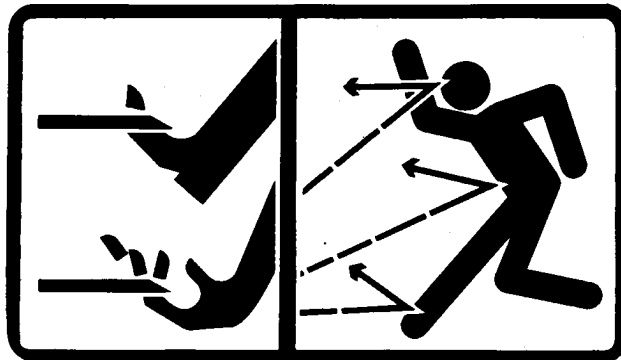
Keep hands, feet, and clothing away from mower deck and discharge chute when blade is turning.

Don't make adjustments while engine is running, unless procedure is approved. STOP ENGINE, then adjust.

Stop mower blade:

- Before you move between jobs.
- Before you cross gravel surface.
- When you are not mowing.

STOP engine before you lift discharge door.



M41447 -UN-30AUG88

MX,SAFW,J -19-14JUL92

SERVICE MOWER SAFELY

Don't modify mower unless changes are approved by John Deere. Don't change governor setting or overspeed engine.

Before you service mower:

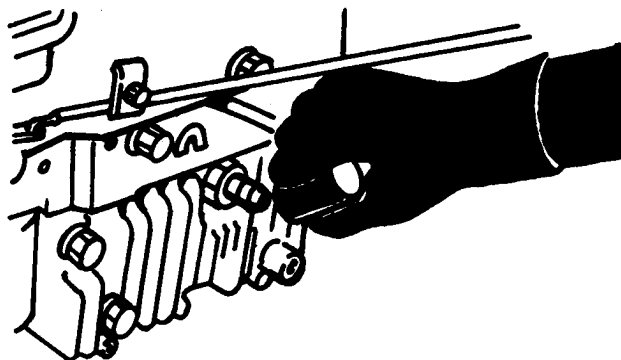
- Put it on level surface
- STOP engine. Let it cool.
- Disconnect spark plug wire. Keep wire away from plug to help prevent accidental starting.

Wear gloves when you service blade.

Keep parts in good condition, fastened in place.

Replace worn or damaged parts immediately.

If fuel tank has to be drained, do it outdoors.



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MX,SAFW,K -19-14JUL92

Operating Engine & Mower Controls

CONTROLS



M73257 -UN-06FEB92



M73646 -UN-06FEB92

A—Starter Handle
B—Blade Control Lever

C—14SZ Traction Clutch
Lever

D—14SZ Gear Shift Lever
E—Throttle Lever

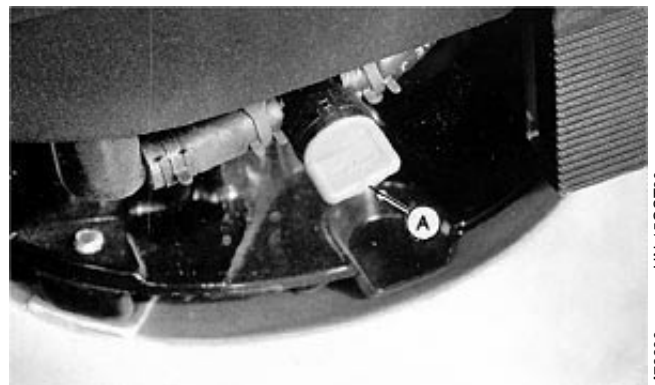
F—Cutting Height Lever
G—Fuel Shutoff Knob—Open

MX,OPFW,A -19-14JUL92

START ENGINE

CAUTION: Engine exhaust fumes can cause sickness or death. Run engine only in ventilated area. If you run engine in enclosed area, remove exhaust with exhaust pipe extension, or open doors to bring in outside air.

1. Turn fuel shutoff knob to OPEN position (A):



M73296 -UN-15OCT90

MX,OPFW,B -19-14JUL92

IMPORTANT: To help prevent damage to starter and band brake, do not start engine:
—When blade is under load, such as, in heavy grass OR
—When blade control lever (C) is RELEASED.

2. 14SZ: RELEASE traction drive lever (A).
3. Move throttle lever (B):
—COLD ENGINE: Move lever to CHOKE position shown.
—WARM ENGINE: Move lever to FAST position (rabbit).
4. Hold lever (C) against handle.

CAUTION: BE ALERT: WHEN ENGINE IS RUNNING, BLADE IS TURNING. Keep hands, feet and clothing away from blade.

5. Pull starter handle (D) until you feel resistance. Then pull fast and steady.

6. When engine starts:
—Return rope slowly until handle is in bracket.
—Pull back throttle lever from CHOKE position.



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MX,OPFW,C -19-14JUL92

STOP ENGINE

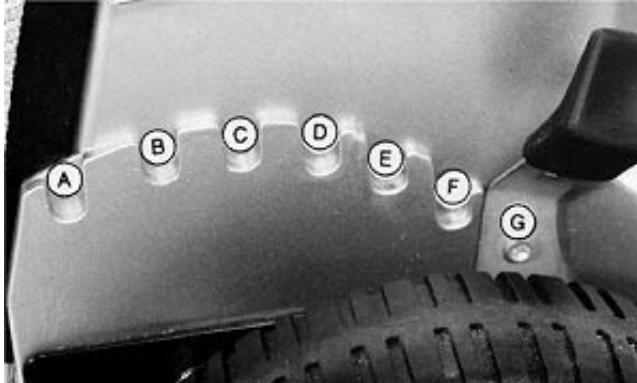
1. 14SZ: RELEASE traction drive lever (A).
2. Pull throttle lever (B) to SLOW (turtle) position shown.
3. RELEASE blade control lever (C).
4. Engine and blade must stop within 3 seconds. If not, see your John Deere dealer.
5. Turn fuel shutoff knob to CLOSED position.



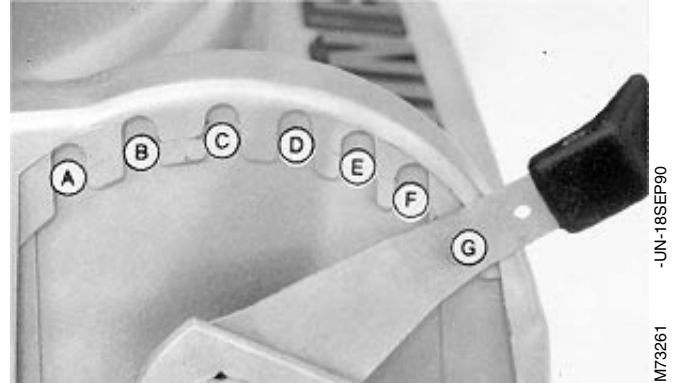
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ADJUST CUTTING HEIGHT



Right Rear



Right Front (wheel removed)

A—1/2 in. (13 mm)
B—1 in. (25 mm)

C—1-1/2 in. (38 mm)
D—2 in. (50 mm)

E—2-1/2 in. (64 mm)
F—3 in. (75 mm)

G—3-1/2 in. (90 mm)



CAUTION: Before you adjust cutting height, STOP ENGINE.

To help move rear wheel levers:

1. Lift lower handlebar slightly with one hand to take some weight off wheel.
2. Move lever to desired position with other hand.

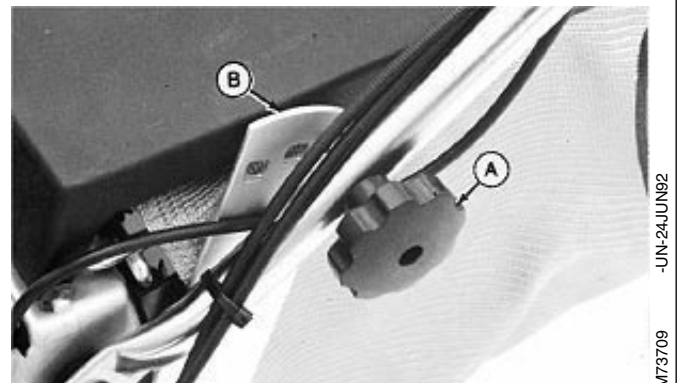
IMPORTANT: Adjust all levers to same height except for **LOWEST** cutting height (A):

- Put front wheel levers in 1/2-in. (13-mm) notch: first rear notch.
- Put rear wheel levers in 1-in. (25-mm) notch: second rear notch.

MX,OPFW,E -19-14JUL92

ADJUST HANDLE HEIGHT

1. Remove knob (A) and bolt from each side.
2. Move handle to desired height.
3. Line up square hole in bracket (B) with hole in handle.
4. Install bolt through holes. Install knob.
5. Repeat steps 2—4 on other side.



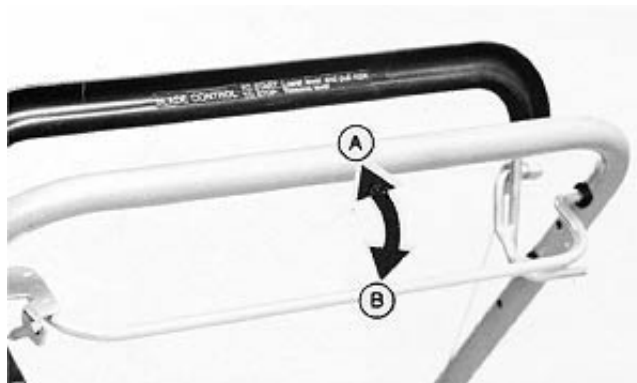
MX,OPFW,F -19-14JUL92

14SZ FORWARD TRAVEL

TO TRAVEL FORWARD: Pull and hold traction clutch lever (B) against handle (A).

TO STOP FORWARD TRAVEL: Release lever (B). Release lever before you turn.

NOTE: Rear wheels will make a clicking noise when you push mower forward. This means drivetrain is operating correctly.



MX,OPFW,G -19-14JUL92

M73266 -UN-18SEP90

14SZ TRAVEL SPEEDS

Travel speeds:

—1st Gear: 2 mph (3.2 kph)

—2nd Gear: 3 mph (5 kph)

To change travel speeds:

1. STOP FORWARD TRAVEL. See 14SZ FORWARD TRAVEL in this section.

2. Move gear lever (A) to desired position:

—1st Gear: Move lever to rear notch as shown.

—2nd Gear: Move lever to forward notch.

3. ENGAGE traction clutch lever.



MX,OPFW,H -19-14JUL92

M73267 -UN-18SEP90

TRANSPORT MOWER

IMPORTANT: Turn fuel shutoff knob to **CLOSED** position (A) before you transport mower. Carburetor float may vibrate during transport and let fuel flow into engine: Engine will then be hard to start.



MX,OPFW,I -19-14JUL92

M73258 -UN-15OCT90

Mowing, Bagging, & Mulching

MOWING TIPS

For details about lawn care, see your John Deere dealer for free booklet, "Common Questions," DKC366.

When you mow an area for the first time, travel SLOW and cut HIGH so you can:

- Learn the terrain.
- Learn the best mowing pattern.
- Help prevent hitting objects hidden in the grass.

Mow grass only when it is dry: Wet grass may plug mower and leave a trail of grass clumps.

Mow grass often: Short grass clippings will decay quickly.

Mow at full throttle for best performance.

Use travel speed that fits conditions:

- Travel SLOW when you mow thick, tall grass.
- FAST travel may produce stripes or uneven cut: slow down.
- Travel at MODERATE speed when you mow a thin stand of grass.

Mow often enough so you cut only top 1/3 of grass in one mowing. Cutting grass too short may kill grass and let weeds grow easily.

Before you make a turn, slow down. Short, fast turns may scuff the ground and pull grass out by roots.

Use the right blade. See your John Deere dealer for kind of blade that would best fit your mowing conditions.

Aerate lawn to help stimulate soil organisms and root growth.

Trimming tips:

- Turn to left around trees, bushes, etc.
- Drive slowly. Avoid hitting trees, bushes, etc.
- If ground slopes up to a tree or bush, you may have to approach the tree or bush straight-on to avoid scalping.

To avoid scalping:

- Pay attention to the way you drive: you can eliminate scalping.
- If mower scalps easily, cutting height may be too low for ground conditions—especially on lawns with many small mounds and ridges.
- Mow over ridges and through shallow ditches straight-on, not at an angle.

Keep blade sharp: Dull blade will tear grass; tips of grass will then turn brown.

Check lawn regularly for uneven cut. If cut is uneven:

- LOOK: Mower may not be level. Adjust cutting height levers.
- Slow down before you make a turn.
- Sharpen blades often.

Use thatcher (available from John Deere dealer) in late spring or summer to pull up dead grass and aerate ground.

After Mowing

1. STOP engine. Let it cool—to prevent fire when you store mower.
2. CLOSE fuel shutoff valve.
3. Remove and shake bag to remove all clippings—to help prevent deterioration of bag and fire.
4. Clean top of deck, engine, and chute with brush or compressed air—to help prevent buildup and fire.
5. Turn mower on side with air cleaner up. Remove mulch plug. Spray under deck with water under pressure to remove corrosive lawn chemicals and buildup.
6. Install bag. Put mower in safe storage.

DISCHARGE CHUTE—OPTIONAL

⚠ CAUTION: Do not operate mower unless grass bag, chute, or mulch plug (optional) is held in place by door.

1. Stop engine. Lift and hold door.
2. Remove grass bag.
3. Install chute. Lower door to hold chute in place.



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BAGGING TIPS

For best performance, bagger needs good airflow. To help increase airflow:

- Keep underside of deck and chute clean.
- Cut only top 1/3 of grass.
- Mow at full throttle.
- Clean bag often with water from garden hose from outside to inside of bag. Let bag dry before use.

IMPORTANT: Do not leave clippings in bag:

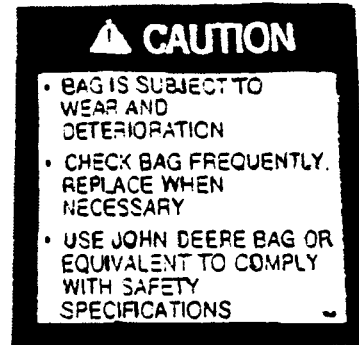
- Moisture may damage bag.
- Damp clippings are fire hazard.

Check clippings in bag often. When bag is full:

- Clippings may blow to side or leave a trail.
- Top of bag will deflate.

MX,MBMFW,D -19-14JUL92

GRASS BAG



Top, Left Corner of Bag

CAUTION: Do not operate mower unless grass bag, chute (optional), or mulch plug (optional) is held in place by door. Before you empty bag, STOP MOWER, BLADE and ENGINE.

1. Lift and hold door (A).
2. Grasp handle (B). Lift bag off mower.

3. RELEASE door.

4. Grasp handle (C) to dump bag.

Bag may wear and deteriorate. Check condition of bag often. Use a John Deere bag or equivalent to comply with safety specifications.

MX,MBMF,C -19-14JUL92

BAGGING AND COMPOSTING

Many communities will no longer haul lawn clippings and leaves to landfills. Bagging and composting clippings and leaves is one way to solve this problem.

Clippings from grass bag may also be used as mulch, or sheet compost, between garden rows and around trees and shrubs. This mulch will:

- Keep weeds from growing.
- Help soil keep moisture.
- Add nutrients to soil as it decays.
- Help keep soil temperature down during hot weather.

You may compost clippings and leaves in various ways. See garden magazines or clubs for information, or go to your local library for help.

See your John Deere dealer for free booklet, LANDSCAPING AND RECYCLING KNOW-HOW for information on composting.

Finished compost is crumbly. It is rich in soil nutrients, and can be spread on your lawn. Compost may also be worked into soil. It adds humus to soil and improves soil texture, making soil looser and easier to work.

MX,MBC,E -19-14JUL92

MULCHING TIPS

Advantages:

- You don't have to rake or bag grass or leaves.
- Lawn holds moisture better during dry weather.
- Soil temperatures stay down during hot weather.
- Mulch adds nutrients to soil, and reduces need for fertilizer.

See your John Deere dealer for free booklet, **LANDSCAPING AND RECYCLING KNOW-HOW** for information on mulching.

Mulching does not make thatch. Frequent shallow watering and fertilizer application produce thatch from roots that grow close to surface.

Be careful when you mulch leaves in Fall. Grass needs sunlight in Fall to help store food for Winter. A thick layer of mulched leaves can prevent sunlight from getting to grass and smother it. You may have to mow with grass bag to remove this layer.

Mulch only when the grass and leaves are dry.

Mulching wet or damp grass or leaves may cause problems:

- Clippings and leaves may build up on underside of mower deck.
- Cut grass and leaves may form clumps.
- Clippings and leaves may not be cut into small bits.
- Engine may work harder and use more fuel.

Cut only top 1/3 of grass at a time.

Use a different mowing pattern each time you mow.

Overlap mowing paths 2 to 4 in. (50 to 100 mm).

Slow down. Mulching takes more power.

Keep blades sharp. Check them often.

Clean underside of deck after each use.

MULCH BLADE—OPTIONAL

See your John Deere dealer for Mulch Plug Kit—includes plug, blade, decal, and instructions.

Mulch blade works equally well with mulch plug, chute, or bag—no need to change blade when you change attachment.

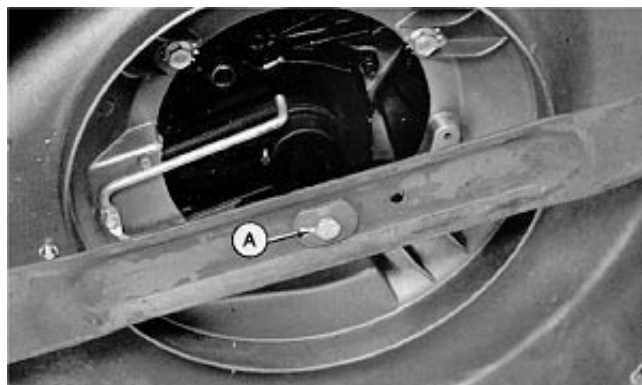


CAUTION: Service mower safely:

- Remove blade when fuel tank is almost empty.
- STOP engine. Let it cool.
- Disconnect spark plug wire.
- Wear gloves or wrap blade with rag.

IMPORTANT: To help prevent air cleaner damage and hard starting, turn mower on **LEFT SIDE**.

1. Disconnect the spark plug wire.
2. Turn fuel shutoff knob to CLOSED position.
3. Turn mower on LEFT SIDE.
4. Remove bolt (A), washer, and blade.
5. Install mulch blade with wings pointing upward.
6. Install washer with cup toward blade.
7. Tighten bolt to 35 lb-ft (47 N·m).
8. Lower mower to floor.



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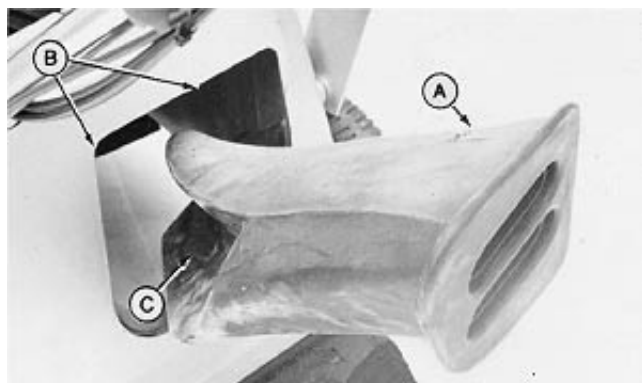
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MULCH PLUG—OPTIONAL



CAUTION: Do not operate mower unless grass bag, chute, or plug is held in place by door. Before you unplug mower or remove mulch plug, STOP engine.

1. Lift and hold door up.
 2. Install plug (A) in opening (B) with C facing left.
 3. Push and turn plug counterclockwise until it is seated.
- Lower door.



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MX,MBMFW,H -19-14JUL92

Troubleshooting

ENGINE WILL NOT START

- Move fuel shutoff knob to OPEN position.
- Fill fuel tank.
- Use correct fuel.
- Use fresh fuel.
- Spark plug:
 - Connect wire.
 - Clean and gap or replace.
- Move throttle lever to correct position.

ENGINE STARTS HARD OR LOSES POWER

- Drain and clean fuel tank. Fill tank with fresh fuel.
- Clean fuel cap vents.
- Clean or replace air cleaner element.
- Spark plug:
 - Connect wire.
 - Clean and gap or replace.

ENGINE RUNS ROUGH

- Adjust carburetor.
- Spark plug:
 - Connect wire.
 - Clean and gap or replace.
- Move throttle lever from CHOKE to FAST.
- Clean cooling fins.
- Clean or replace air cleaner element.

ENGINE OVERHEATS

- Clean blower housing and cooling fins.

ENGINE VIBRATES TOO MUCH

- Tighten blade cap screw.
- Sharpen and balance blade.

MOWER PUSHES OR PULLS HARD

- Lubricate rear axle.
- Adjust 14SZ traction clutch.

MOWER MOWS UNEVENLY

- Push 14PZ mower slower OR use 14SZ 1st gear.
- Travel slower around corners.
- Change mowing pattern.
- Adjust all wheel levers to same position.
- Sharpen and balance blade.

DISCHARGE CHUTE PLUGS

- Let grass dry.
- Raise cutting height.
- First pass: Cut top half of grass.
- Second pass: Cut at desired height.
- Empty grass bag.
- Travel slower.
- Run engine at FULL THROTTLE.
- Wash grass bag.

14SZ MOWER JERKS OR WILL NOT SELF-PROPEL

- Adjust traction clutch.
- Clean debris from top of transmission.
- Move gear shift lever slightly forward or back.

MULCHED GRASS APPEARANCE IS POOR: CLUMPS, EXCESSIVE CLIPPINGS, ROUGH CUT, ETC.

- Remove no more than top 1/3 of grass each pass.
 - Example: Cut 4-1/2-in. (115-mm) grass to 3 in. (75 mm) on first pass.
- Let grass dry.
- Travel slower.
- Run engine at FULL THROTTLE.
- Sharpen or replace blade.

Service—Miscellaneous

LUBRICATE REAR AXLE BUSHINGS—25 HOURS

Lubricate bushing on each side with John Deere Multipurpose Grease or equivalent.



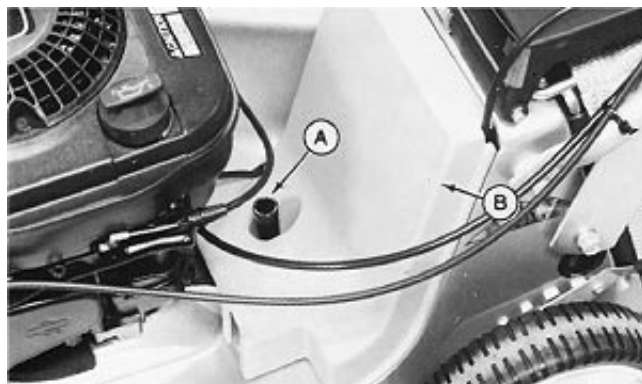
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CLEAN 14SZ BELT AREA—25 HOURS

⚠ CAUTION: Before you remove shield, STOP engine. Let it cool. Don't operate mower without belt shield.

1. Remove knob (A) and belt shield (B).



MX,MIFW,D -19-14JUL92

M73279 -UN-12NOV90

2. Use a brush or compressed air to remove clippings or debris from belt area.

3. Install shield and knob.



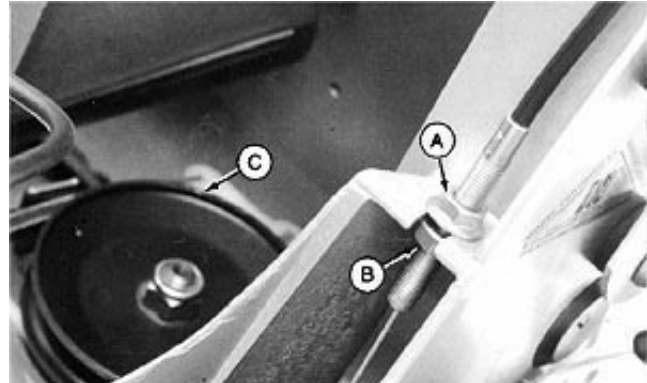
MX,MIFW,E -19-14JUL92

M73281 -UN-18SEP90

ADJUST 14SZ TRACTION CABLE—AS NECESSARY

Adjust cable if mower slows going uphill.

⚠ CAUTION: Don't operate mower without belt shield. Before you adjust clutch:
—STOP engine. Let it cool.
—Keep people and pets away from mower.
—Avoid belt when engine is running.



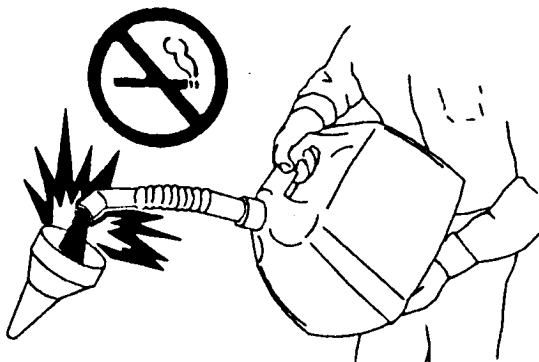
1. Remove knob and belt shield. See CLEAN 14SZ BELT AREA, step 1, in this section.
2. Loosen nut (A). Turn nut (B) down 1/8 in. (3 mm).
3. Tighten nut (A). Start engine.
4. ENGAGE traction clutch lever to check clutch action.
5. If clutch needs more tension, repeat steps 2 and 3.
6. LOOK: Pulley (C) should not turn when engine is running and clutch lever is DISENGAGED. If pulley turns, turn nuts (A and B) up.

MX,MIFW,F -19-14JUL92

M73706 -UN-22JUN92

Service—Engine

HANDLE FUEL SAFELY—AVOID FIRES



CAUTION: Handle fuel with care: it is highly flammable.

- Keep mower free of clippings, oil, and dirt.
- Don't smoke near fuel.
- Don't fuel mower near open flame or sparks.
- STOP ENGINE. Let it cool.
- Fill fuel tank outdoors.
- Don't fill tank to top. Allow room for fuel to expand.
- Clean up spilled fuel immediately.
- Move mower away from fueling area before you start engine.
- Don't store mower with fuel in tank in a building where fumes may reach an open flame or spark.

Help prevent fire and explosion caused by static electric discharge when you fill tank:

- Use a non-metal fuel container.
- When you use a funnel, USE A PLASTIC FUNNEL.
- Avoid using a funnel which has a metal screen or filter.

Store oil and fuel in area protected from dust, moisture, and other contamination.

MX,ENFW,A -19-25JUN92

FUEL & ENGINE OIL

Recommended Fuel

- Clean, fresh regular or unleaded gasoline.
- Gasohol with no more than 11% ethyl alcohol.

Don't use fuel with more than 3% methanol, or fuel left from last mowing season.

Recommended Engine Oil

- John Deere TORQ-GARD® SUPREME 30W engine oil.
- API Service Class SF or SG oils.

MX,ENFW,B1 -19-14JUL92

CHECK OIL LEVEL—BEFORE USE

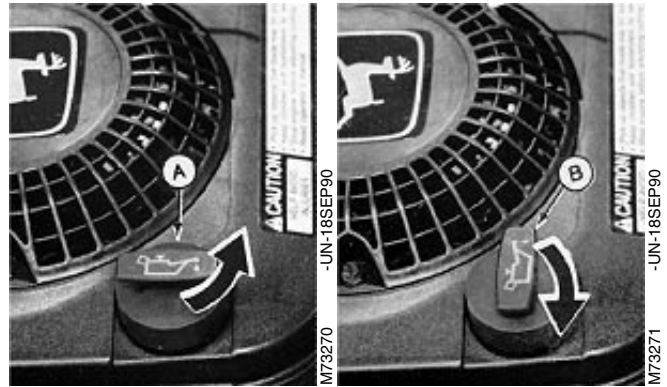
IMPORTANT: Change oil after first 5 hours of operation.

CAUTION: Before you check or add oil, **STOP** engine. Let it cool.

1. Stop engine. Put mower on level surface.
2. Remove dipstick (A): Turn it counterclockwise 1/4 turn. Wipe it.
3. Install and tighten dipstick in position B: Turn it clockwise 1/4 turn.

IMPORTANT: If oil level is below **ADD** mark, **DO NOT** run engine.

4. Remove dipstick. Check oil level. Oil should be between **ADD** and **FULL MARKS**—not above **FULL MARK**.
5. Add oil, if necessary. See **ENGINE OIL** in this section for correct oil.
6. Install and tighten dipstick.



Remove
M73272 -UN-10FEB92

Install



MX,ENFW,C -19-14JUL92

CHANGE ENGINE OIL—AFTER FIRST 5 HOURS AND EVERY 25 HOURS OR END OF SEASON

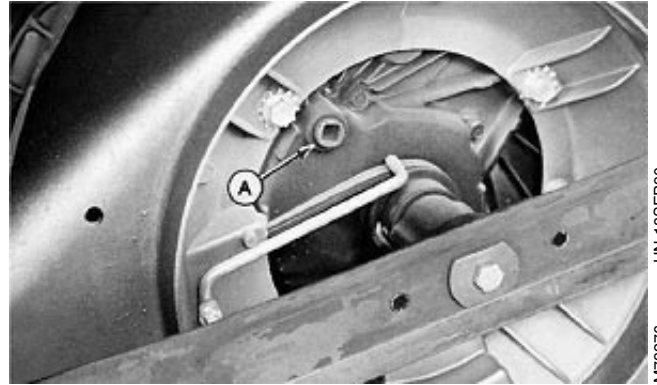


CAUTION: Used oil may harm environment and people if it is dumped on ground or into a drain or body of water. Call your local Recycling Center or John Deere dealer to learn how to recycle used oil.

IMPORTANT: Change oil after first 5 hours of operation. If you do not run mower 25 hours during mowing season, change oil before you store mower.

IMPORTANT: To help prevent air cleaner damage and hard starting, turn mower on **LEFT SIDE**.

1. Turn mower on **LEFT SIDE**.
2. Put a shallow pan under mower.
3. Remove drain plug (A). Lower mower over pan.
4. After oil has drained, turn mower on **LEFT SIDE**. Install plug.
5. Lower mower. Remove dipstick. See **CHECK ENGINE OIL** in this section to remove dipstick and check oil.
6. Add 20 oz (0.6 L) oil through dipstick tube. See **ENGINE OIL** in this section for correct oil.



M73276 -UN-18SEP90

CLEAN AIR CLEANER ELEMENT—25 HOURS

NOTE: If you operate mower in dusty conditions, clean element often.

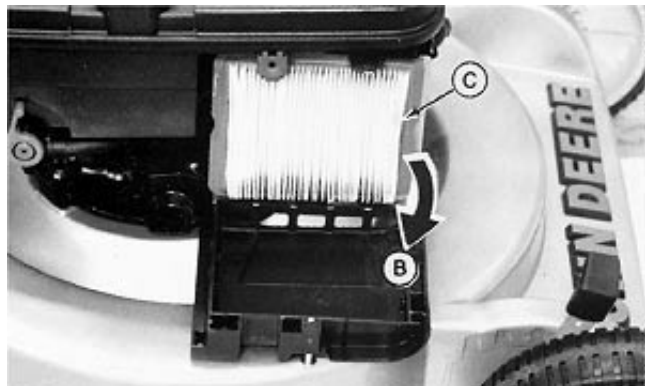
CAUTION: Before you remove element, **STOP** engine. Let it cool.

IMPORTANT: Do not run engine without element. If element is damaged, replace it.

1. Loosen screw (A). Pivot cover (B) down.
2. Remove element (C).
3. Tap element gently to remove dust.
4. If element is very dirty, sooty, oily, or damaged, **REPLACE** it.
5. Install element and cover.



M73273 -UN-18SEP90



M73274 -UN-18SEP90

MX,ENFW,E -19-14JUL92

CLEAN AND GAP SPARK PLUG—25 HOURS

CAUTION: Before you remove plug, **STOP** engine. Let it cool.

1. Disconnect spark plug wire (A). Remove plug.
2. Carefully wire brush carbon from plug. Don't clean it with abrasives in a machine.
3. Inspect plug for damage. Replace damaged plug.
4. Adjust gap: 0.030 in. (0.76 mm).
5. Install and tighten plug to 15 lb-ft (20 N·m)
6. Connect wire.



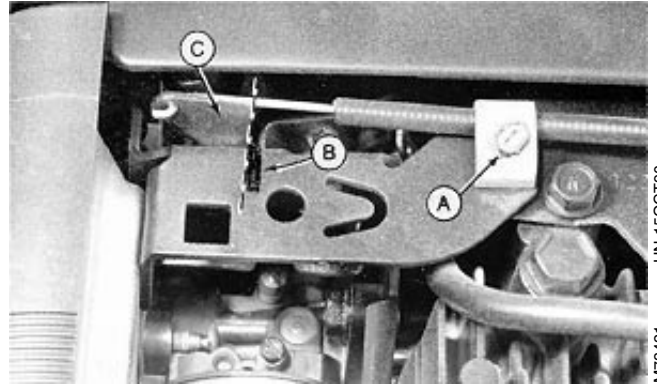
M73278 -UN-18SEP90

MX,ENFW,F -19-14JUL92

ADJUST THROTTLE CABLE—AS NECESSARY

CAUTION: Before you adjust cable, STOP engine. Let it cool.

1. Move throttle lever to FAST. Loosen screw (A).
2. Insert screwdriver into slot (B) to align edge of arm (C) with edge of slot. Alignment is shown by dotted line.
3. Tighten screw. Remove screwdriver.



M73421 -UN-15OCT90

MX,ENFW,H -19-14JUL92

ADJUST SLOW IDLE—AS NECESSARY

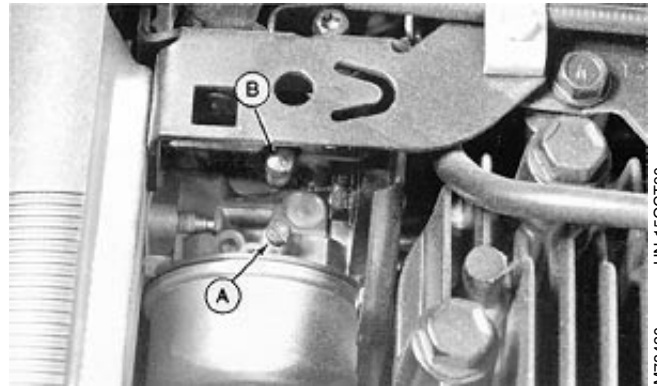
You will need a vibration tachometer for this adjustment. See your John Deere dealer.

SLOW IDLE should be 1200—1600 rpm. Engine should run smoothly at whatever rpm you use. Instructions below use 1400 rpm.

1. Turn screw (A) clockwise until you feel needle lightly contact seat. Back out screw 1-1/4-turns.
2. Warm engine at HALF-THROTTLE, no load.

CAUTION: Be careful: ENGINE IS HOT.

3. Move throttle control lever to SLOW.
4. Set tachometer at 1400 rpm. Put tachometer on top of recoil starter housing.
5. Adjust screw (B) until engine is running at 1400 rpm.
6. Turn screw (A) in until rpm's begin to drop. Then turn screw out until rpm's gain then begin to drop. Turn screw to halfway between the two dropoff points.
7. Adjust screw (B) until engine runs at 1400 rpm.
8. Move throttle control lever from SLOW to FAST several times. If engine does not accelerate smoothly, turn screw (A) out 1/8-turn.



M73420 -UN-15OCT90

MX,ENFW,I -19-14JUL92

CLEAN FUEL CAP VENTS—AS NECESSARY

⚠ CAUTION: Before you remove cap, STOP engine. Let it cool. Do not smoke.

1. Remove cap. Check two vents (A) under metal ring and vent in top, center of cap.
2. Clean cap and vents in nonflammable solvent. Let it dry. Install it.



MX,ENFW,J -19-14JUL92

M73283 -UN-01OCT90

CLEAN FINS—AS NECESSARY

⚠ CAUTION: Before you clean fins, STOP engine. Let it cool.

IMPORTANT: Keep fins clean or engine may overheat.

Clean fins with brush, rag, or compressed air. Also blow compressed air under shroud.



MX,ENFW,G -19-14JUL92

M73282 -UN-18SEP90

Service—Blade

CHECK/TIGHTEN/REMOVE BLADE



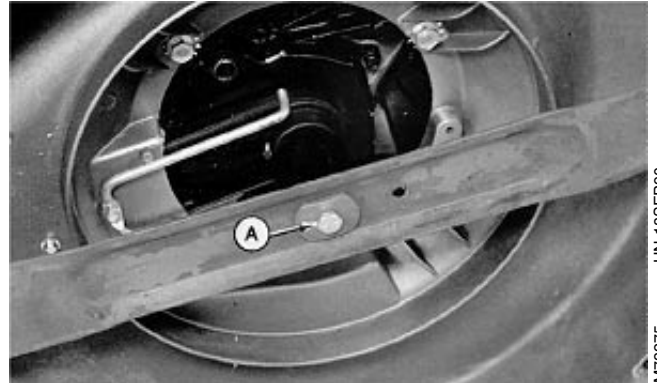
CAUTION: Service blade safely:
—STOP engine. Let it cool.
—Disconnect spark plug wire.
—Wear gloves or wrap blade with rag.

IMPORTANT: To help prevent air cleaner damage and hard starting, turn mower on **LEFT SIDE**.

Tighten Bolt (A) to 35 lb-ft (47 N·m) Every 25 Hours.

Check Blade: Replace damaged blade. Sharpen dull blade.

Remove Blade: Remove bolt (A), washer, and blade. *Note that blade tip wing points up and washer cup is against blade. Blade adapter and shaft key may also come off. They must be installed before you install blade.*



M73275 -UN-18SEP90

MX,BLFW,A -19-14JUL92

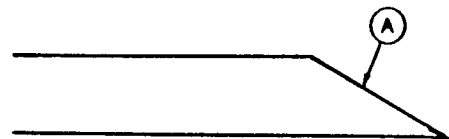
SHARPEN BLADE—AS NECESSARY



CAUTION: Wear gloves and goggles.

Sharpen blade: Keep original bevel (A).

IMPORTANT: Balance blade after you sharpen it. Unbalanced blade may cause excessive vibration. See next procedure.



M61830 -UN-29JUL91

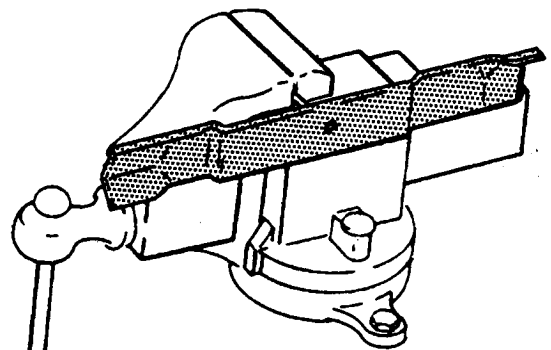
MX,BLFW,C -19-14JUL92

BALANCE & INSTALL BLADE—AS NECESSARY



CAUTION: Wear gloves and goggles.

1. Clean blade. Put it on nail in vise or wall. Heavy end of blade will drop. Grind bevel of heavy end. Do not change bevel.
2. Install blade, washer, and bolt. Tighten bolt to 35 lb-ft (47 N·m).



M61524 -UN-01SEP88

MX,BLFW,D -19-14JUL92

Storage

STORE MOWER



CAUTION: Fuel is highly flammable. Do not smoke while you service fuel system. Wipe up spilled fuel immediately.

IMPORTANT: Use gasoline stabilizer: It helps prevent varnishing and plugging of carburetor jets. Either of these could cause engine to run lean, and result in piston seizure and engine failure.

1. Clean engine and top of deck.
2. Remove belt shield. Clean belt, transmission area. Install shield.

3. Disconnect spark plug wire. Turn mower onto LEFT SIDE.

4. Remove mulch plug. Clean underside of deck with water under pressure to remove grass buildup and lawn chemicals. Lower mower to ground.

5. Use John Deere Gasoline Storage Stabilizer or equivalent. Follow directions on can.

6. Install spark plug but don't connect wire.

7. Lubricate rear axle bushings.

8. Turn fuel shutoff knob to CLOSED position: VERTICAL.

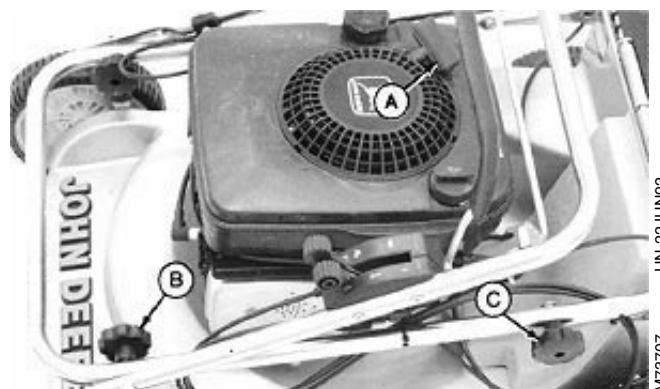
9. Fold handles down, if desired. See below.

10. Do not store mower with fuel in tank in a building where fumes may reach an open flame or spark.

MX,STFW,A

-19-14JUL92

FOLD & UNFOLD HANDLES



IMPORTANT: Don't crimp cables.

FOLD HANDLES

1. Remove starter handle (A) from bracket.
2. Loosen knob (B) on each side. Let handle pivot down.
3. Remove knob (C) and bolt from each side.
4. Pivot lower handle down. Install knob (C) as shown.

UNFOLD HANDLES

1. Remove knob (C) and bolt from each side.
2. Straighten upper handle and tighten knob (B) on each side.
3. Line up lower handle hole with square hole in bracket. Install bolt and knobs on each side.
4. Hold blade lever against handle, slowly pull starter handle (A) and install it in bracket.

MX,STFW,C -19-14JUL92

REMOVE FROM STORAGE

1. Unfold handles.
2. Fill fuel tank with fresh fuel. See Service—Engine section for correct fuel.
3. Check engine oil level.
4. Inspect mower hardware, shields, and safety devices.

5. Connect wire to spark plug.
6. Lubricate rear axle bushings.
7. Turn fuel shutoff knob to OPEN position.
8. Run engine at HALF-THROTTLE briefly.

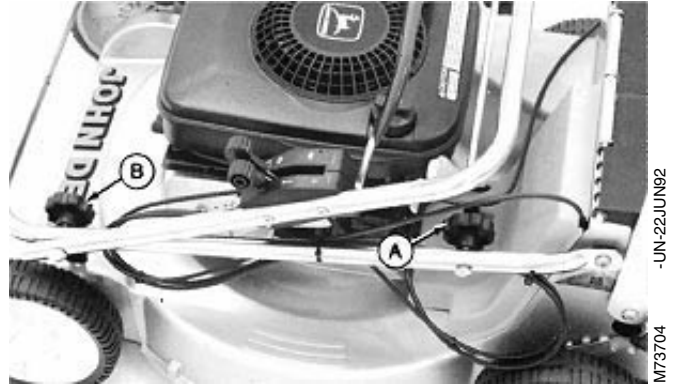
MX,STFW,B -19-14JUL92

Assembly

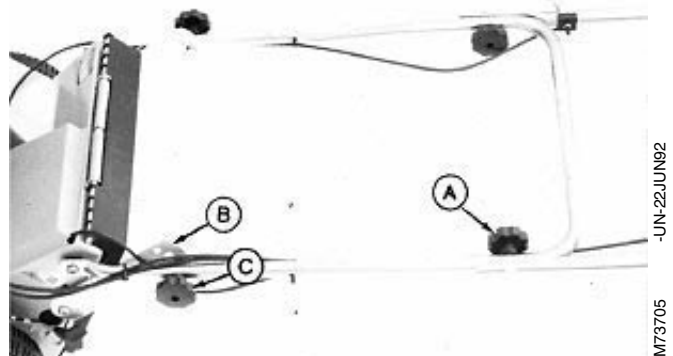
UNFOLD HANDLE

IMPORTANT: Don't crimp cables.

1. Loosen knob (B) on each side.
2. Remove knob (A) and bolt from each side.



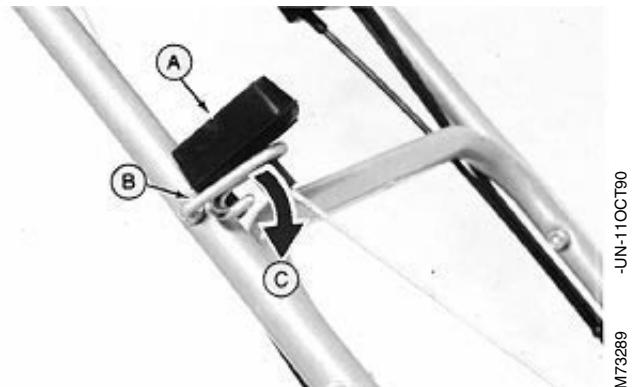
3. Pivot upper handle to straight position.
4. Tighten knob (A) on each side.
5. Hold handle and install bolt through square hole of bracket (B) and handle. Install knob (C) on outside of handle.
6. Repeat step 5 on other side.



INSTALL STARTER HANDLE IN BRACKET

CAUTION: BE ALERT: When you pull starter handle, blade also turns and engine may start. Don't pull starter handle without blade control lever engaged.

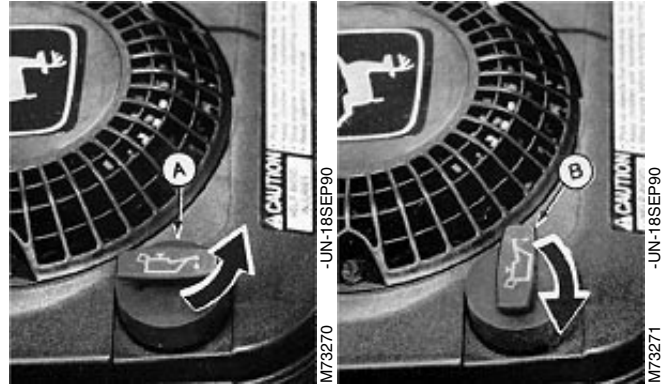
1. Pull starter handle (A) to rear and install rope in bracket (B).
2. Pivot bracket forward (C).



ADD ENGINE OIL

IMPORTANT: Engine is shipped without oil. You must add oil before you run engine.

1. Turn dipstick (A) 1/4 turn counterclockwise & remove it.
2. Add 1-1/4 pt (0.6 L) oil through dipstick tube. See Service—Engine section for oil.
3. Check oil level:
 - Install and tighten dipstick in position B: Turn it clockwise 1/4 turn.
 - Remove dipstick.
 - Check oil on dipstick: Oil should be between ADD and FULL MARKS: Close to FULL MARK. If not, add oil.
4. Install and tighten dipstick.
5. Remove RED NO OIL tag from top of engine.



M73272

-UN-10FEB92



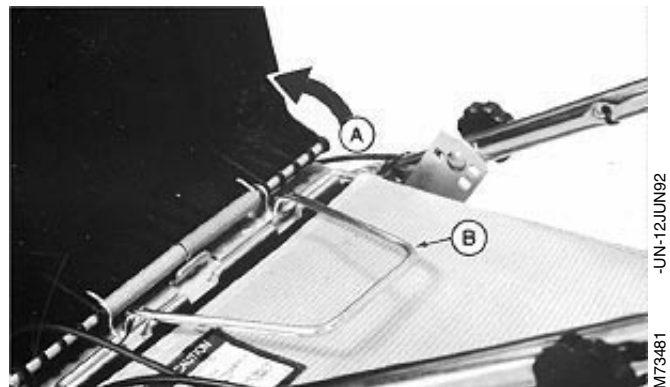
MX,ASFW,C

-19-14JUL92

INSTALL GRASS BAG

CAUTION: Do not operate mower unless grass bag, chute (optional), or mulch plug (optional) is held in place by door.

1. Lift and hold door (A).
2. Grasp handle (B). Install bag.

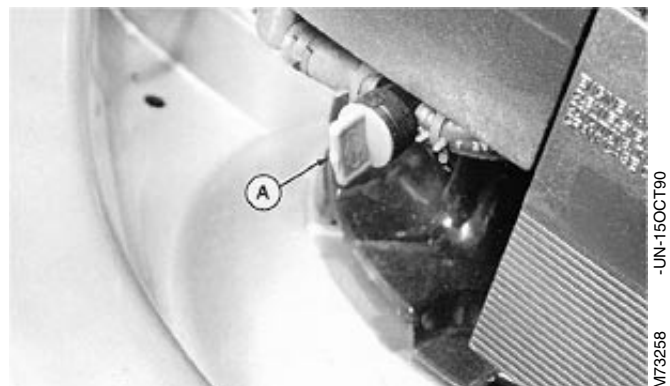


MX,ASFW,F

-19-14JUL92

TEST MOWER OPERATION

1. Put enough fuel in tank to test mower operation. See Service—Engine section for correct fuel.
2. Turn fuel shutoff knob (A) to OPEN position.
3. Start engine and check mower operation. See Operating Engine & Mower Controls section.
4. Turn fuel shutoff knob to CLOSED position.



MX,ASFW,G

-19-14JUL92

Specifications

MOWER SPECIFICATIONS

- Cutting height: 1/2 to 3-1/2 in. (13 to 90 mm)
- 7 cutting heights in 1/2-in. (13-mm) steps
- Blade bolt torque: 35 lb-ft (47 N·m)
- 14SZ has 2-speed transaxle:
 - 1st gear: 2 mph (3.2 kph)
 - 2nd gear: 3 mph (5 kph)
- Safety system: band brake on flywheel
- Wheel diameter: 8 in. (200 mm)
- Bag capacity: 2.5 bu (0.09 cm³)
- DBA: NA
- Weight (approximate): 93 lb (42 kg)

(Specifications and design subject to change without notice)

MX,SPFW,A -19-14JUL92

ENGINE SPECIFICATIONS

- John Deere B engine
- Model: 4-cycle
- 5 hp (3.7 kW)
- 11.56 cu in. (190 cc)
- Bore & stroke: 2.64 x 2.04 in.
(68 x 52 mm)
- Slow idle: 1200—1600 rpm
- Operating range: 2900—3100 rpm
- Recoil starter
- Air cleaner: paper element
- Fuel tank: 1.5 qt (1.4 L)
- Oil: 20 oz (0.6 L)
- Spark plug: Champion RCJ8
- Spark plug gap: 0.030 in. (0.76 mm)

(Specifications and design subject to change without notice.)

MX,SPFW,B -19-14JUL92

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15.00 to 24.99	4.25
25.00 to 49.99	5.50
50.00 to 99.99	7.50
100.00 and over	4% of subtotal

Optional shipping available.
Please check and add cost to
normal shipping above.

☐	1 day air	\$15.00
☐	2 day air	\$10.00

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Illinois state residents add 6.25% and Iowa state residents add 4% for Retail Occupation Tax or show tax exemption number. Other states excluded.

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John Deere Service Keeps You on the Job



John Deere is at your service when you need it

John Deere takes pride in providing superior service. We'll be around when you need us. To help minimize downtime, we maintain a large and varied parts inventory. Precision tools and testing equipment enable dealerships to locate and correct troubles quickly. We hold regular training schools for service technicians so they know your equipment and how to maintain it. Our goal is to provide prompt, efficient service through competent dealerships.

Your dealer is interested in your satisfaction and stands ready to help you with your service needs. When you need service:

- First, discuss the problem with your dealership service manager.
- If unable to resolve, see the dealership manager, explain the problem, and request assistance. Make sure your dealer is aware of your problem and has the opportunity to help you. Your dealer can request company assistance if needed.
- If you have a persistent problem that your dealership is unable to satisfy, contact the John Deere branch office within your geographic area on the map.

Be prepared with the following information:

- Machine model and product serial number (PIN)
- Date of purchase
- Selling/servicing dealer
- Nature of problem

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