

14PZ and 14SZ 21-Inch Walk-Behind Rotary Mowers (Serial No. 100001–)



JOHN DEERE

OPERATORS MANUAL

**14PZ and 14SZ 21-Inch Walk-Behind Rotary
Mowers (Serial No. 100001–)**

OMM121567 J5 English

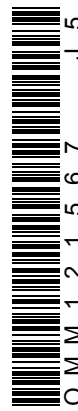
**John Deere
Lawn & Grounds Care Division
OMM121567 J5**

Export Version

**LITHO IN U.S.A.
ENGLISH**



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INTRODUCTION

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 and safety signs on your machine may also be available in other languages (see your John Deere dealer to order).

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 given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

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

BEFORE DELIVERING THIS MACHINE, your dealer performed a predelivery inspection to ensure best performance.

THIS WALK-BEHIND MOWER IS DESIGNED SOLELY for use in customary lawn mowing or similar operation. Use in any other way is considered as contrary to the intended use.

The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

INTRODUCTION

THIS WALK-BEHIND MOWER SHOULD BE OPERATED, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with the relevant safety rules (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times.

Any arbitrary modifications carried out on this walk-behind mower will relieve the manufacturer of all liability for any resulting damage or injury.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the space provided below. 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. File the identification numbers in a secure place off the machine.

Date of Purchase:

Dealer Name:

Phone:

Engine Serial Number:



Vehicle Serial Number:

M63014

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SAFETY SIGNS

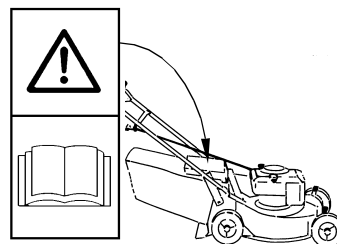
Pictorial Safety Signs

At several important places on this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle . An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown in this Safety Signs section.



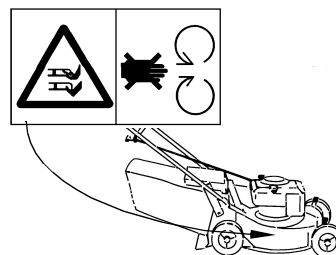
Read Operators Manual

This operator's manual contains important information necessary for safe machine operation. Observe all safety rules to avoid accidents.



Avoid Injury From Rotating Blades

DO NOT put hands or feet under or into mower when engine is running.



Appears on both sides of deck

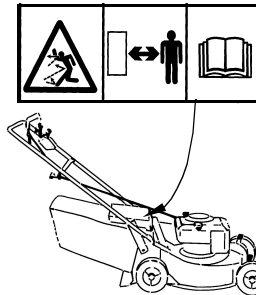
SAFETY SIGNS

Avoid Injury From Thrown Objects

DO NOT operate mower without discharge chute or entire grass catcher in place.

Stay clear while engine is running.

Read operator's manual.

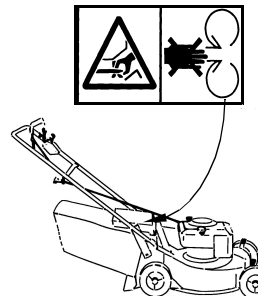


Avoid Injury From Rotating Blades

DO NOT operate mower without discharge chute.

Stop engine before lifting door and clearing discharge.

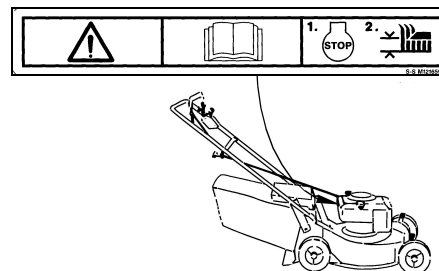
DO NOT lift or block door open with blade engaged.



Avoid Injury When Adjusting Cutting Height

Read operator's manual.

STOP engine before adjusting cutting height.

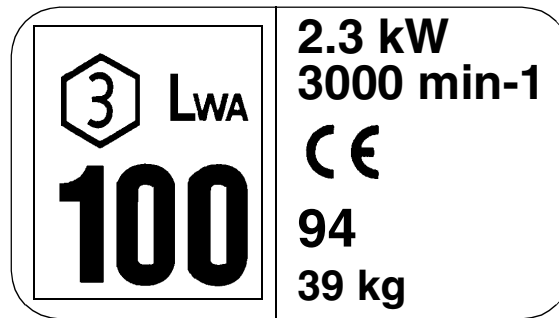


SAFETY SIGNS

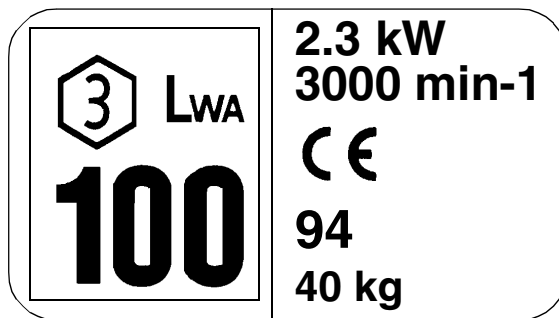
Sound Label

This label on your mower indicates that this model has been certified and is in compliance with European Directive 84/538EEC Standards.

14PZ:

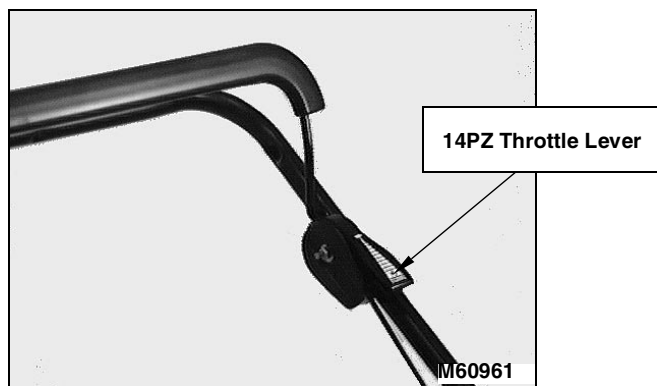


14SZ:



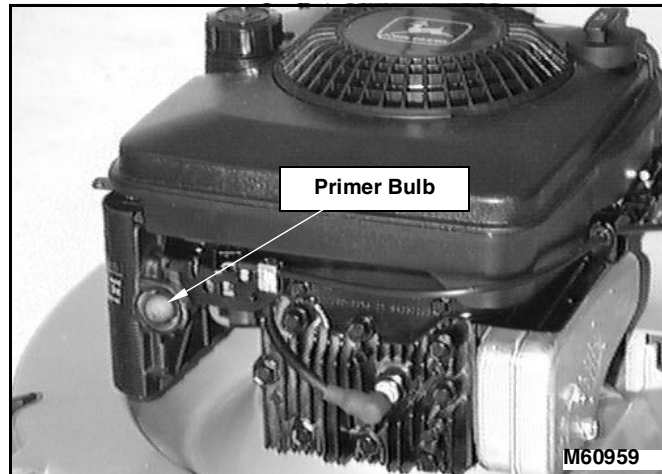
CONTROLS

Handle Controls



CONTROLS

Engine Controls



Mower Control



OPERATING

SAFETY

Operate Safely



- Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Be sure proper guards, plates, grass catcher, or other safety protective devices are in good condition and fastened in place. Make any necessary adjustments before you operate.
- Clear work area of objects that might be thrown. Keep people and pets out of the work area. Stop machine if anyone enters the area.
- If you hit an object, stop the machine and inspect it. Make repairs before you operate. Keep machine properly maintained and in good working order. Keep all guards, plates, grass catcher, or other safety devices in place.
- DO NOT leave machine unattended when it is running.
- Only operate during daylight or with good artificial light.
- Be sure of footing. Be especially careful when you pull machine backwards with the engine running.
- Mow across a hill - not up and down. Be careful when you change direction on a slope. Do Not mow excessively steep slopes.
- DO NOT mow wet grass. Reduced traction could cause you to slip.
- Stop the blade when crossing gravel drives, walks, or roads.
- Keep a firm hold on the machine handle.
- DO NOT wear radio or music headphones while operating the machine. Safe operation requires your full attention.
- DO NOT operate mower if you are under the influence of drugs or alcohol.

OPERATING

Rotating Blades Are Dangerous - Protect Children And Prevent Accidents



PROTECT CHILDREN:

- Never assume that children will remain where you last saw them. Children are attracted to mowing activity, stay alert to the presence of children.
- Keep children in the house when you are operating the machine.
- Turn machine off if a child enters the area.
- Use extra care when you come to blind corners, shrubs, trees, or other objects that may block your vision.
- DO NOT let children or an untrained person operate the machine.

HELP PREVENT SERIOUS OR FATAL ACCIDENTS:

- Be alert at all times, people ESPECIALLY CHILDREN can move quickly into the area before you know it.
- Shut off blades when you are not mowing.
- Keep hands, feet, and clothing away from rotating blades.

Wear Appropriate Clothing



- Wear close fitting clothing and safety equipment appropriate for the job.
- Do Not operate the equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- Loud noise can cause impairment or loss of hearing, wear a suitable protective device such as earplugs.

OPERATING

ADJUSTMENTS

Adjust Cutting Height



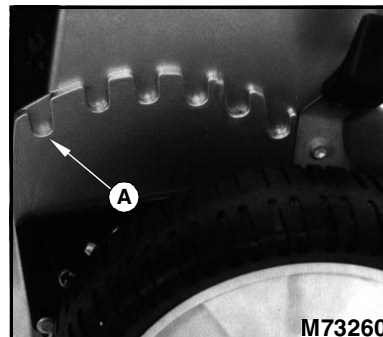
CAUTION: Before you adjust cutting height:
• STOP ENGINE.

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

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

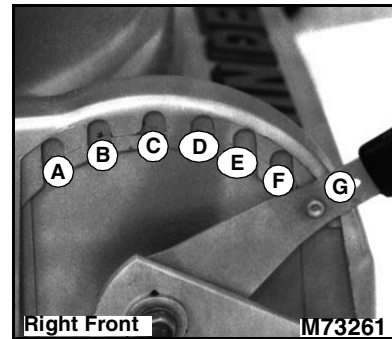
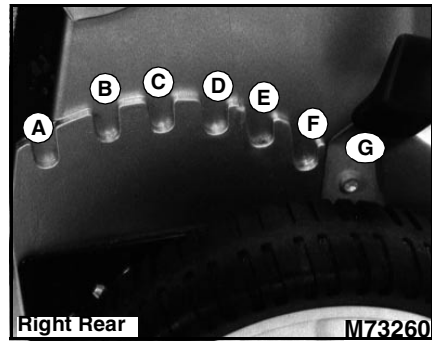
To help move rear wheel levers:

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



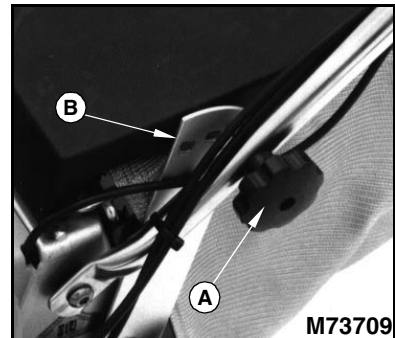
OPERATING

Key	Cutting Height Adjustments In MM (Inches)
(A)	13 mm (1/2-in.)
(B)	25 mm (1-in.)
(C)	38 mm (1-1/2-in.)
(D)	50 mm (2-in.)
(E)	64 mm (2-1/2-in.)
(F)	75 mm (3-in.)
(G)	90 mm (3-1/2-in.)



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.



OPERATING

Starting Engine



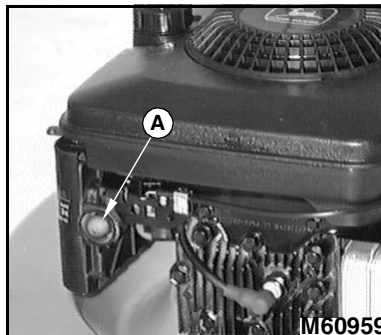
CAUTION: Engine exhaust fumes can cause sickness or death. Run engine only in a ventilated area. If you run engine in an enclosed area, remove exhaust with exhaust pipe extension, or open doors to bring in outside air.



IMPORTANT: To help prevent damage to starter and band brake, do not start the engine:

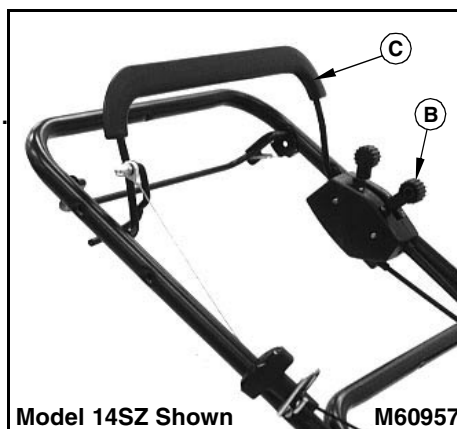
- When blade is under load, such as, in heavy grass OR
- When blade control lever is RELEASED.

1. Prime engine by pressing primer bulb (A) three times.



2. Move throttle lever (B) to the FAST  position.

3. Hold lever (C) against handle.



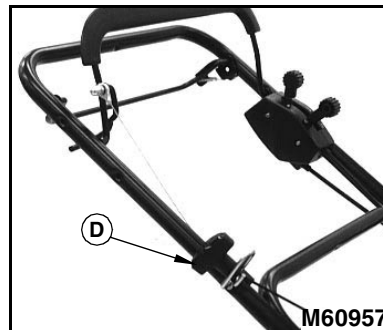
OPERATING

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

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

5. When engine starts:

- Return rope slowly until handle is in bracket.



Forward Travel (14SZ)

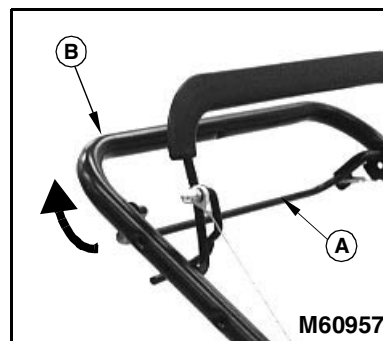
TO TRAVEL FORWARD:

Pull and hold traction clutch lever (A) against handle (B).

TO STOP FORWARD TRAVEL:

Release lever (A). Release lever before you turn.

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



OPERATING

Travel Speeds (14SZ)

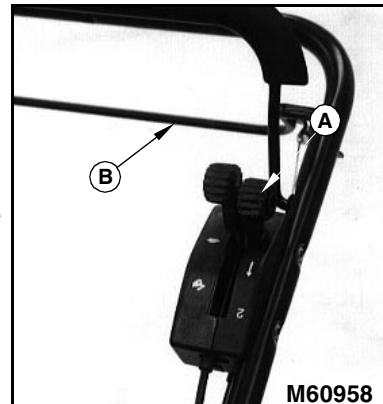
Travel speeds:

- 1st Gear: 3.2 kph (2 mph)
- 2nd Gear: 5 kph (3 mph)

To change travel speeds:

1. STOP FORWARD TRAVEL. Move gear lever (A) to desired position:

- 1st Gear: Move lever to rear notch as shown.
- 2nd Gear: Move lever to forward notch.



2. Engage traction clutch lever (B).

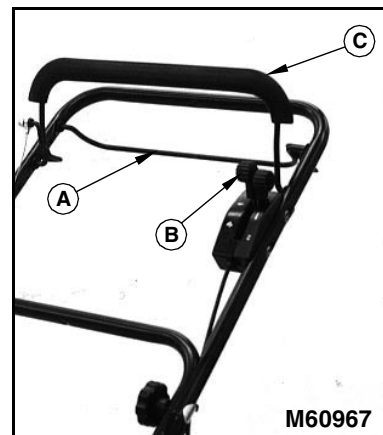
Stopping Engine

1. 14SZ: Release traction clutch lever (A).

2. Pull throttle lever (B) to the SLOW  position.

3. Release blade control lever (C).

4. Engine and blade must stop within 3 seconds. If not, see your John Deere dealer.

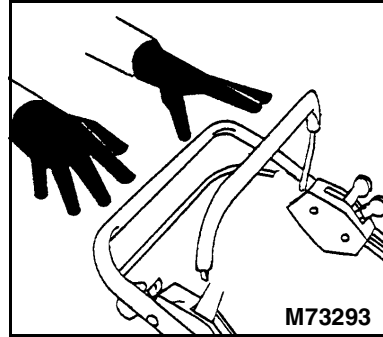


OPERATING

Emergency Stopping

Release handle and levers:

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



Using Discharge Chute (Optional)



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

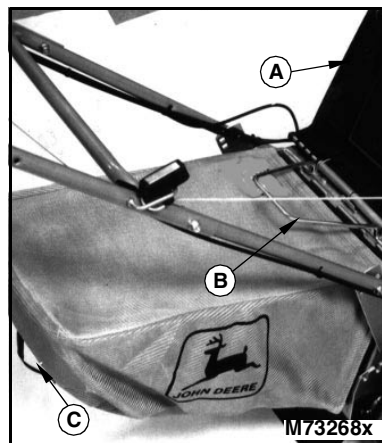


OPERATING

Using Grass Bag

1. Lift and hold door (A).
2. Grasp handle (B). Lift bag off mower.
3. Release door.
4. Grasp handle (C) to dump bag.

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

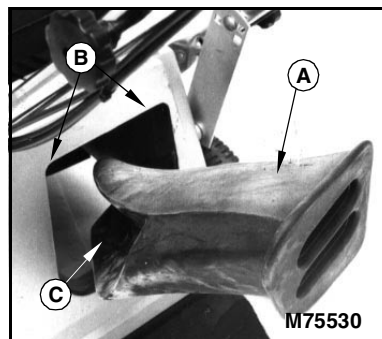


Using Mulch Plug (Optional)



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 to the left until it is seated.
4. Lower door.



OPERATING

Using Mulch Blade (Optional)

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

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

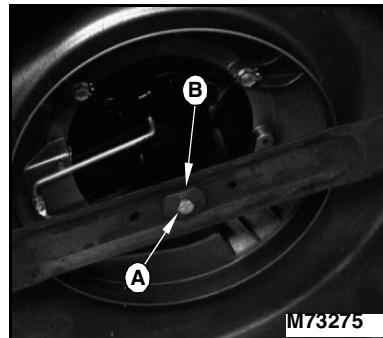


CAUTION: Service mower safely:

- 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 its LEFT SIDE.

1. Disconnect spark plug wire.
2. Turn mower on its LEFT SIDE.
3. Remove bolt (A) and washer (B) and blade.
4. Install mulch blade with wings pointing upward.
5. Tighten bolt to 47 N•m (35 lb-ft).
6. Lower mower to the floor.



LAWN CARE

Mowing Tips

Before mowing, be sure deck is leveled and mower wheels are in the proper position.

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 a travel speed that fits the conditions:

- Travel SLOW when you mow thick, tall grass.
- FAST travel or sharp turns may produce stripes or uneven cut. Slow down. Short, fast turns may scuff ground and pull grass out by the roots.
- Travel at MODERATE speed when you mow a thin stand of grass.

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

See your John Deere dealer for blades that will best fit your mowing conditions.

Aerate lawn to help stimulate soil organisms and root growth.

LAWN CARE

Trimming Tips

- 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.
- Rear gauge wheels must be adjusted correctly.
- Mow over ridges and through shallow ditches straight-on, not at an angle.

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

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

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

LAWN CARE

Bagging Tips

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

- Keep underside of deck and chute clean.
- Cut grass high.
- 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 a fire hazard.
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Check clippings in bag often. When bag is full:

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

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.

LAWN CARE

Bagging And Composting (Continued)

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.

Mulching Tips

Advantages:

- You do not 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.

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 the underside of the 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.

LAWN CARE

Mulching Tips (Continued)

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

Use a different mowing pattern each time you mow. Overlap mowing paths 50–100 mm (2–4 in.).

Slow down. Mulching takes more power.

Keep blades sharp. Check them often.

Clean underside of deck after each use.

After Mowing

- STOP engine. Let it cool. This will help prevent starting a fire when you store the mower.
- Remove and shake bag to remove all clippings. This will help to prevent deterioration of bag and starting a fire.
- Clean top of deck, engine, and chute with brush or compressed air, if possible. This will help to prevent buildup and starting a fire.
- Spray under deck with water under pressure to remove corrosive lawn chemicals and buildup.
- Install bag. Put mower in safe storage.
- Turn mower on its side with air cleaner up. Remove mulch plug.

REPLACEMENT PARTS

WE RECOMMEND JOHN DEERE quality parts and lubricants, available at your John Deere dealer.

PART NUMBERS MAY CHANGE, use part numbers listed below when you order. If a number changes, your dealer will have the latest number.

WHEN YOU ORDER PARTS, your John Deere dealer needs your machine serial number. This is the number you have recorded on the inside front cover of this manual.

ITEM	PART NUMBER
Air Cleaner Element	AM116236
Belt	M77167
Standard Blade	M112972
Mulching Blade	M112972
Spark Plug	Champion RCJ8

(Part numbers are subject to change without notice. Part Numbers may be different outside the U.S.A.)

SERVICE MACHINE SAFELY

Practice Safe Maintenance



- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate or service machine while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- To prevent them from getting caught, keep hands, feet, clothing, jewelry, and long hair away from any moving parts.
- Before servicing machine, disengage all power and stop the engine. Let engine cool.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.
- Unauthorized modifications to the machine may impair its function and safety.

Wear Appropriate Clothing



- Wear close fitting clothing and safety equipment appropriate for the job.
- Loud noise can cause impairment or loss of hearing, wear a suitable protective device such as earplugs.
- Do not wear radio or music headphones while servicing the machine. Safe service requires your full attention.

SERVICE MACHINE SAFELY

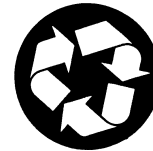
Avoid Injury From Contacting Blades



Before you unplug or adjust machine:

- STOP the engine.
- Wait for blades to STOP.
- Keep hands, feet and clothing away from blades when engine is running.

Handling Waste Products



- Waste products, such as, used oil, fuel, and batteries, can harm the environment and people.
- DO NOT use beverage containers for waste fluids - someone may drink from them.
- See your local Recycling Center or John Deere dealer to learn how to recycle or get rid of waste products.

SERVICE

Service Intervals

BEFORE EACH USE	• Check oil level.
AFTER EACH USE	• Clean the mower.
5 HOURS	• Change engine oil.
25 HOURS	• Change engine oil. • Clean air cleaner element. • Tighten blade bolt; 47 N•m (35 lb-ft) • Lubricate rear axle bushings. • Clean and gap spark plug. • Clean belt and transmission area (14SZ).
50 HOURS	• Change engine oil.
100 HOURS	• Have your John Deere dealer check flywheel brake liner.

Service Record

DATE	SERVICE PERFORMED

SERVICE

Avoid Fumes



CAUTION: Engine exhaust fumes can cause sickness or death:



- If it is necessary to run an engine in an enclosed area, use an exhaust pipe extension to remove the fumes.
- Always try to work in a well ventilated area.

Engine Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.

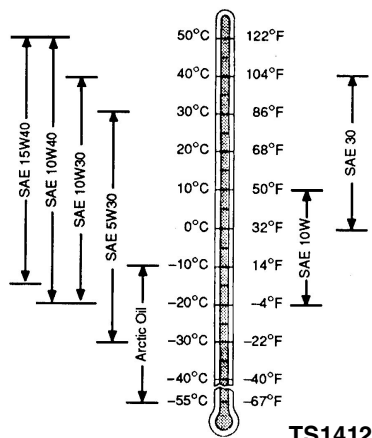
The following oil is preferred:

- John Deere PLUS-4®

Other oils may be used if they meet one of the following:

- API Service Classification SG
- API Service Classification SF
- CCMC Specification G4

Oils meeting Military Specification MIL-L-46167B may be used as arctic oils.



SERVICE

Checking Engine Oil Level

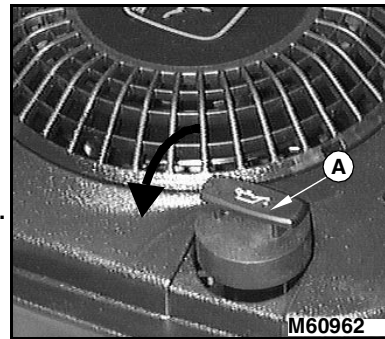
IMPORTANT: Change oil after first 5 hours of operation.



CAUTION: Before you check or add oil:

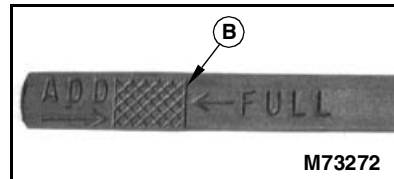
- STOP engine. Let it cool.

1. Stop engine. Put mower on level surface.
2. Turn dipstick (A) to the left 1/4 turn and remove it.
3. Wipe dipstick off with a clean cloth.
4. Install dipstick, turn it to the right 1/4 turn and tighten it.



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

5. Remove dipstick. Check oil level. Oil should be between ADD and FULL MARKS (B)—not above FULL MARK.
6. Add oil, if necessary.
7. Install and tighten dipstick.



SERVICE

Changing Engine Oil



CAUTION: Used oil may harm environment and people if it is dumped on ground or into a drain or body of water.

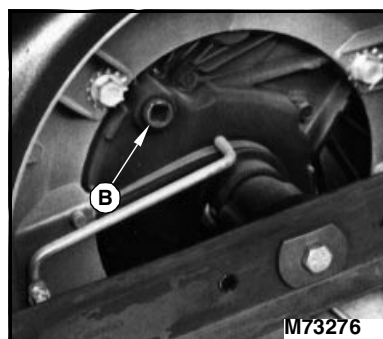
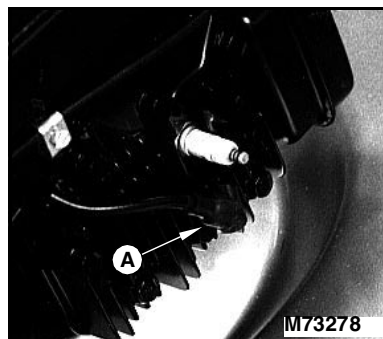
Call your local Recycling Center or John Deere dealer to learn how to recycle used oil.

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.

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

1. Disconnect spark plug wire (A).
2. Turn mower on LEFT SIDE.
3. Put a shallow pan under mower.
4. Remove drain plug (B) using a 3/8 in. driver head. Lower mower over pan.
5. After oil has drained, turn mower on LEFT SIDE. Install plug.
6. Lower mower. Remove dipstick.
7. Add 0.6 L (20 oz) oil through dipstick tube.
8. Install the dipstick.



SERVICE

Cleaning Air Cleaner Element

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

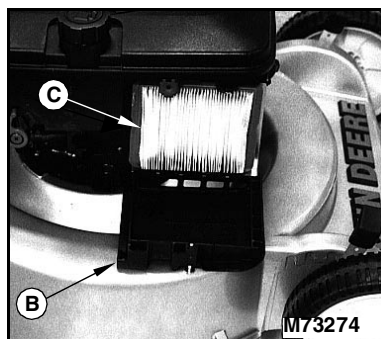


CAUTION: Before you remove element:

- STOP engine. Let it cool.

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

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



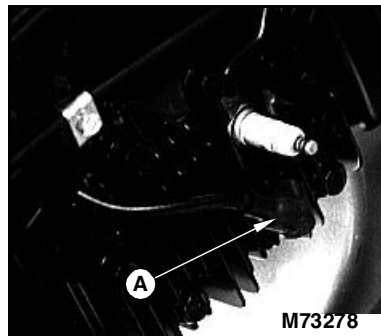
SERVICE

Cleaning And Gapping Spark Plug



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. Do not clean it with abrasives in a machine.
3. Inspect plug for damage. Replace damaged plug.
4. Adjust gap: 0.76 mm (0.030 in.).
5. Install and tighten plug to 20 N•m (15 lb-ft).
6. Connect wire.



Cleaning Fins

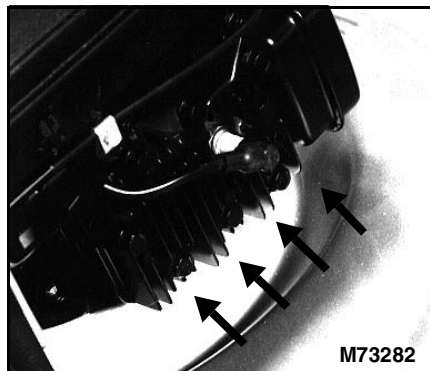


CAUTION: Before you clean fins:
• STOP engine.
• Let it cool.

IMPORTANT: Keep fins clean or engine may overheat.

Clean fins with brush, rag, or compressed air.

Also blow compressed air under shroud.



SERVICE

Adjusting Slow Idle



CAUTION: Be careful: ENGINE IS HOT

NOTE: Some engines were built with slow idle mixture screw. If screws (A) and (B) are present on your machine, you may need to adjust slow idle.

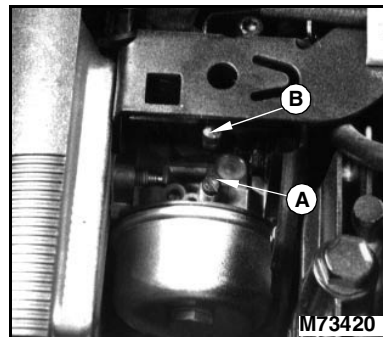
You will need a vibration tachometer for this adjustment. See your John Deere dealer.

SLOW IDLE should be 2400—2600 rpm. Engine should run smoothly at whatever rpm you use. Instructions below use 2500 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.

3. Move throttle control lever to SLOW  position.



4. Set tachometer at 2500 rpm. Put tachometer on top of recoil starter housing.

5. Adjust screw (B) until engine is running at 2500 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 drop-off points.

7. Adjust screw (B) until engine runs at 2500 rpm.

8. Move throttle control lever from SLOW  to FAST  position several times. If engine does not accelerate smoothly, turn screw (A) out 1/8-turn.

SERVICE

Adjusting Traction Cable (14SZ)

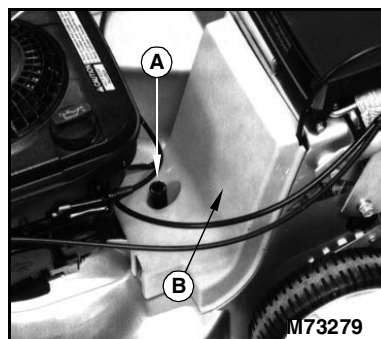
NOTE: Adjust Cable If Mower Slows Going Uphill.



CAUTION: Do Not 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 (A) and belt shield (B).

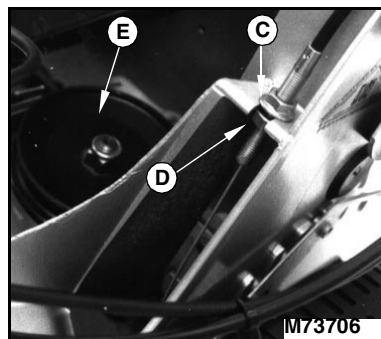


2. Loosen nut (C). Turn nut (D) down 3 mm (1/8 in.).

3. Tighten nut (C). Start engine.

4. ENGAGE traction clutch lever to check clutch action.

5. If clutch needs more tension, repeat Steps 2 and 3.



6. Pulley (E) should not turn when engine is running and clutch lever is DISENGAGED. If pulley turns when engine is running, traction clutch cable is adjusted too tight.

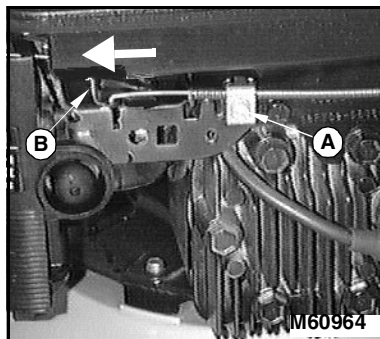
SERVICE

Adjusting Throttle Cable



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

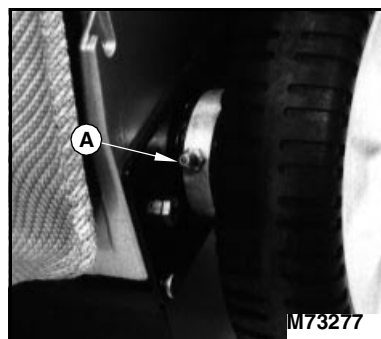
1. Move throttle lever to the FAST  position.
2. Loosen screw (A).
3. Using your finger, move throttle control cable (B) all the way to the left until it stops.
4. Tighten screw (A) on throttle cable clamp.



SERVICE

Lubricate Rear Axle Bushings

Lubricate bushing (A) on each side with John Deere Multipurpose Grease or an equivalent.



Grease

Use grease based on the expected air temperature range during the service interval.

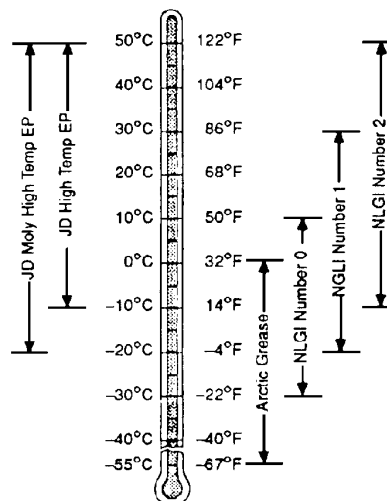
The following greases are preferred:

- John Deere MOLY HIGH TEMPERATURE EP GREASE
- John Deere HIGH TEMPERATURE EP GREASE
- John Deere GREASE-GARD™

Other greases may be used if they meet one of the following:

- SAE Multipurpose EP Grease with a maximum of 5% molybdenum disulfide.
- SAE Multipurpose EP Grease

Greases meeting Military Specification MIL-G-10924F may be used as arctic grease.



SERVICE

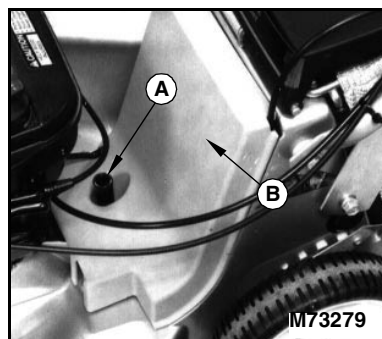
Cleaning Belt Area (14SZ)



CAUTION: Before you remove shield:

- STOP engine. Let it cool.
- Do Not operate mower without belt shield.

1. Remove knob (A) and belt shield (B).
2. Use a brush or compressed air to remove clippings or debris from belt area.
3. Install shield and knob.



SERVICE

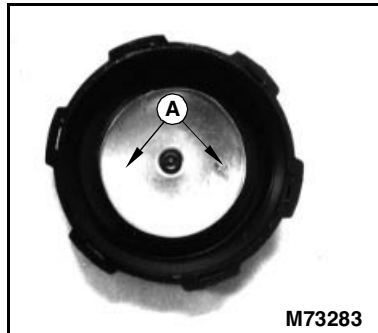
Cleaning Fuel Cap Vents



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 cap dry.
3. Install the cap.



Check, Tighten, And Remove Blade



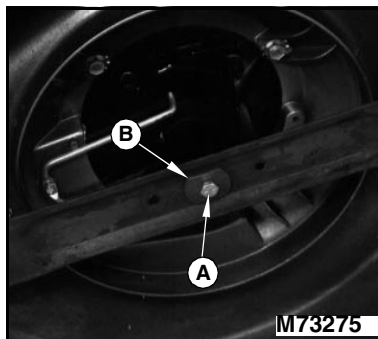
CAUTION: Service blade safely:

- 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.

1. Tighten Bolt (A) to 47 N•m (35 lb-ft).
2. Check Blade: Replace damaged blade. Sharpen dull blade.
3. Remove Blade: Remove bolt (A), washer (B), and blade.

NOTE: Make sure blade tip wing points up and washer cup is against blade.



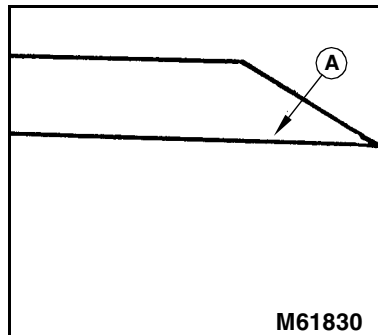
SERVICE

Sharpen Blade



CAUTION: Wear gloves and goggles when sharpening, balancing or installing blade.

Sharpen blade: Keep original bevel (A)

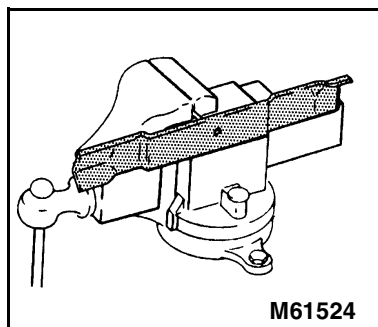


M61830

IMPORTANT: Balance blade after you sharpen it. An unbalanced blade may cause excessive vibration.

Balance And Install Blade

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



M61524

SERVICE

Handle Fuel Safely



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



- DO NOT refuel machine while you smoke, when machine is near an open flame or sparks, or when engine is running. STOP engine.
- Fill fuel tank outdoors.
- Prevent fires: clean oil, grease and dirt from machine. Clean up spilled fuel immediately.
- Do not store machine with fuel in tank in a building where fumes may reach an open flame or spark.
- To prevent fire and explosion caused by static electric discharge, while you fill tank, use a non-metal fuel container. If you use a funnel, MAKE SURE it is PLASTIC. Avoid using a funnel which has a metal screen or filter.
- Use only clean oil and fuel and clean approved containers and funnels.
- Store oil and fuel in an area protected from dust, moisture and other contamination.

SERVICE

Filling Fuel Tank

IMPORTANT: Avoid spilling fuel. Fuel can damage plastic and painted surfaces.
DO NOT mix oil with gasoline. Only use unleaded gasoline with an octane rating of 87 or higher.
Fuel tank capacity is 1.4 L (1.5 qt).

- Remove any trash from top of fuel tank drain area.
- Use summer blended fuel for warm weather operation and winter blended fuel for cold weather.
- Never use fuel that is stale or has been stored for a long period of time:

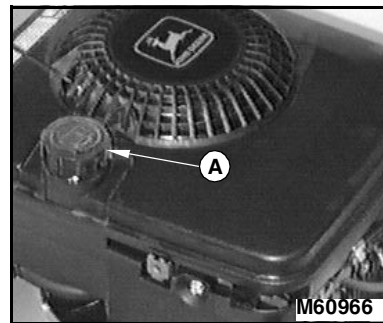
Warm Weather - Maximum 60 days.

Cold Weather - Maximum of 90 days.

- Fill fuel tank at the end of each day's operation. This helps to keep condensation out of fuel tank.

NOTE: Fuel tank capacity is 1.4 L (1.5 qt).

1. Remove fuel cap (A).
2. DO NOT fill tank to top; fuel can expand.
3. Fasten fuel cap.
4. Wipe off any spilled fuel.



TROUBLESHOOTING

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your John Deere dealer for service.

When you have checked all the possible causes listed and you are still experiencing the problem, see your John Deere dealer.

IF	CHECK
ENGINE WILL NOT START	Engine not primed three times.
	Fuel tank is empty.
	Stale or dirty fuel.
	Disconnected or dirty spark plug.
	Throttle lever not in fast position.
ENGINE STARTS HARD OR LOSES POWER	Dirty fuel tank cap vents.
	Stale or dirty fuel.
	Dirty air cleaner element.
	Disconnected or dirty spark plug.
ENGINE RUNS ROUGH	Carburetor needs to be cleaned.
	Disconnected or dirty spark plug.
	Throttle lever not in fast position.
	Dirty cooling fins.
	Dirty air cleaner element.

TROUBLESHOOTING

IF	CHECK
ENGINE OVERHEATS	Dirty blower housing and cooling fins.
ENGINE VIBRATES TOO MUCH	Loose blade bolt.
	Blade dull or not balanced.
MOWER PUSHES OR PULLS HARD	Rear axle not lubricated.
	Traction clutch needs adjustment (14SZ).
MOWER MOWS UNEVENLY	Pushing mower (14PZ) too fast.
	Mowing too fast around corners and mowing pattern not changed.
	Wheel levers not adjusted in the same position.
	Blade dull or not balanced.
DISCHARGE CHUTE PLUGS	Grass not dry.
	Cutting height not raised high enough.
	Dirty or full grass bag.
	Mowing too fast.
	Engine not in full throttle position.

TROUBLESHOOTING

IF	CHECK
MOWER JERKS OR WILL NOT SELF- PROPEL (14SZ)	Traction belt broken.
	Traction clutch not adjusted.
	Dirty transmission.
	Gear shift lever not in 1st or 2nd gear.
MULCHED GRASS APPEARANCE IS POOR: CLUMPS, EXCESSIVE CLIPPINGS, ROUGH CUT, ETC:	Grass not dry.
	Mowing too fast.
	Engine not in full throttle position.
	Blade dull or not balanced.
	Cutting height set too low.

STORING MACHINE

Storing Mower Safely



CAUTION: Engine exhaust fumes can cause sickness or death.



- If it is necessary to run an engine in an enclosed area, use an exhaust pipe extension to remove the fumes. Always try to work in a well ventilated area.
- DO NOT store mower with fuel in the tank inside a building where fumes may reach an open flame or spark.
- Allow engine to cool before storing in any enclosure.

Storing Mower

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.
Follow directions on stabilizer can.

1. Clean engine and top of deck.
2. Remove belt shield.
3. Clean belt and transmission area. Install shield.
4. Disconnect spark plug wire. Turn mower onto its LEFT SIDE.
5. Remove mulch plug. Clean underside of deck with water pressure to remove grass buildup, lawn chemicals, and fertilizer.
6. Lower mower to the ground.

STORING MACHINE

7. Use John Deere Gasoline Storage Stabilizer or an equivalent. Follow directions on can.
8. Lubricate rear axle bushings.
9. Remove bolts and fold handles down, if desired. Do not crimp cables.
10. Do not store mower with fuel in tank in a building where fumes may reach an open flame or spark.

Remove Mower From Storage

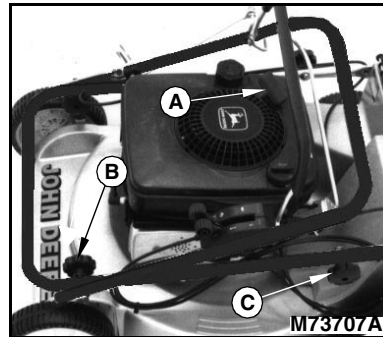
1. Unfold handles. Tighten knobs. Do not crimp cables.
2. Fill fuel tank with fresh gasoline.
3. Check engine oil level.
4. Connect wire to spark plug.
5. Inspect shields, safety devices and hardware.
6. Lubricate rear axle bushings.
7. Push primer bulb three times to prime engine.
8. Run engine at the HALF-THROTTLE position briefly.

STORING MACHINE

Fold Handles

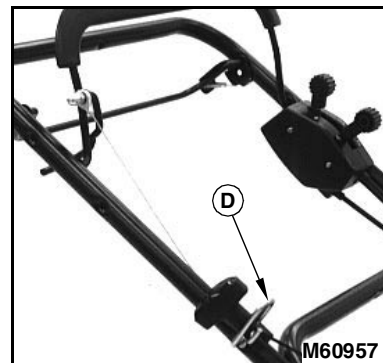
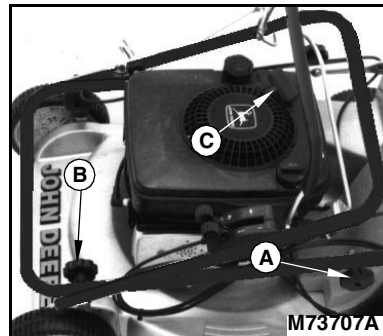
IMPORTANT: Don't crimp cables.

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 (A) 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 (C) and install it in bracket (D).

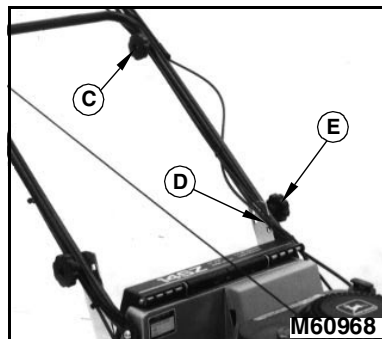
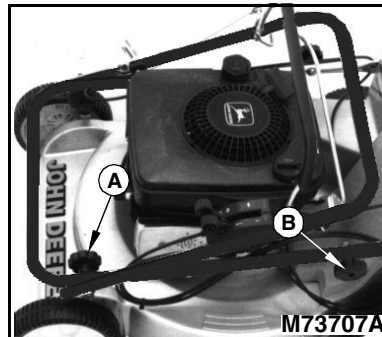


ASSEMBLY

Unfold Handle

IMPORTANT: Do not crimp cables.

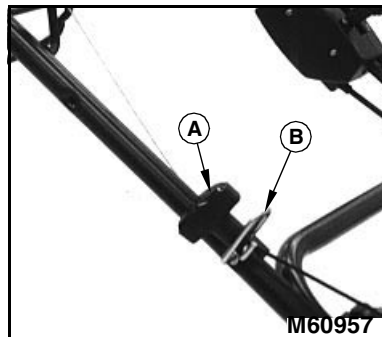
1. Loosen knob (A) on each side.
2. Remove knob (B) and bolt from each side.
3. Pivot upper handle to straight position.
4. Tighten knob (C) on each side.
5. Hold handle and install bolt through square hole of bracket (D) and handle. Install knob (E) on outside of handle.
6. Repeat Step 5 on other side.



Install Starter Handle In Bracket

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

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



ASSEMBLY

Add Engine Oil

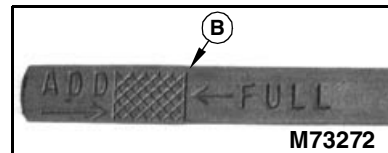
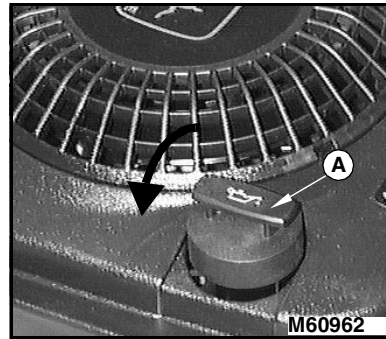
IMPORTANT: Engine is shipped without oil. You must add oil before you run engine.

1. Turn dipstick (A) to the left 1/4 turn and remove it.

2. Add 0.6 L (20 oz) oil through dipstick tube.

3. Check oil level:

- Install dipstick, turn it to the right 1/4 turn and tighten it.
- Remove dipstick.
- Check oil level: Oil should be between ADD and FULL MARKS (B): Close to FULL MARK. If not, add oil.



4. Install and tighten dipstick.

5. Remove RED NO OIL tag from top of engine.

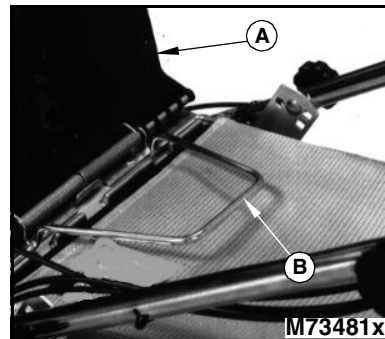
ASSEMBLY

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.
3. Lower door to hold bag in place.



Test Mower Operation

1. Put enough fuel in tank to test mower operation.
2. Press primer bulb (A) three times to prime engine.
3. Move throttle lever to the fast  position.
4. Start engine and check mower operation. (See Operating section).



SPECIFICATIONS

Engine

Model	"B" Series
Engine Power/ECE-R85	2.3 kW (5.0 hp)
Cycle	4
Displacement	190 cc (11.56 cu in)
Bore & Stroke	68 x 52 mm (2.64 x 2.04 in.)
Operating Range	2900—3000 rpm
Speed (slow idle), no load	2400—2600 rpm
Engine Oil Capacity	0.6 L (20 oz)
Spark Plug	Champion RCJ8
Spark Plug Gap	0.76 mm (0.030-in.)
Starter	Recoil
Air Cleaner	Paper Element

Fuel System

Fuel	Unleaded
Fuel Tank Capacity	1.4 L (1.5 qt)

Vibration

Hand/arm measured per ISO5349	
Maximum weighted acceleration M/s^2 : • 14SZ	7.6

SPECIFICATIONS

Machine Specifications

Cutting Height Range	13–90 mm (1/2–3-1/2 in.)
Number of Cutting Heights in 1/2-in. (13-mm) Steps	7
Blade Hardware Torque	47 N•m (35 lb-ft)
Travel Speed Range 14SZ	1st Gear - 3.2 kph (2 mph) 2nd Gear - 5 kph (3 mph)
Number of Travel Speeds	2
Safety System	Zone Start
Wheel Diameter	200 mm (8 in.)
Bag Capacity	74 L (2.5 bu)
Weight (approximate)	42 kg (93 lb)

Recommended Lubricants

Fuel	Unleaded Gasoline
Engine Oil	John Deere PLUS-4®
Grease	John Deere MOLY HIGH TEMPERATURE EP GREASE
	John Deere HIGH TEMPERATURE EP GREASE
	John Deere GREASE GARD™

(Specifications and design subject to change without notice.)

SPECIFICATIONS

CERTIFICATE OF CONFORMITY

John Deere Horicon Works
Horicon, Wisconsin 53032, USA

declares that the lawn mower

Type	14SZ	Cutting unit type	Rotary
Serial No. Range	GX149ZB	Cutting width	53 cm
Engine	Gasoline, 4-stroke	Measured sound power level	99 dBa
Manufacturer	Briggs & Stratton		
Engine type	3214-124702	Tested by	LNE, Paris, France
		Test No.	2110260
Engine test speed	3058 rpm	Date	23 November 1992

complies with the provisions contained in Directive 84/538/EEC

Horicon, (17August94)



**GARY L. DAVIS
MANAGER
POWER PRODUCTS**

SPECIFICATIONS

DECLARATION OF CONFORMITY

DEERE & COMPANY
JOHN DEERE ROAD
MOLINE, ILL 61265-8098 USA

I, THE UNDERSIGNED:
DECLARE THAT THESE MACHINES

TYPE 14SZ

SERIAL NUMBER 14SZC

COMPLY WITH THE APPLICABLE REQUIREMENTS OF:

MACHINE DIRECTIVE 89/392/EEC

EMC DIRECTIVE 89/336/EEC

DONE AT:
JOHN DEERE HORICON WORKS 1 JULY 1994



GARY L. DAVIS
MANAGER
POWER PRODUCTS

NOTES

NOTES

NOTES

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NOTES

JOHN DEERE SERVICE KEEPS YOU ON THE JOB

John Deere Parts

We help minimize downtime by putting genuine John Deere parts in your hands in a hurry.

That's why we maintain a large and varied inventory - to stay a jump ahead of your needs.



The Right Tools

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly ... to save you time and money.

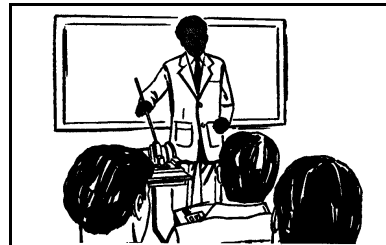


Well-Trained Technicians

School is never out for John Deere service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result? - Experience you can count on!



Prompt Service

Our goal is to provide prompt, efficient care when you want it and where you want it.

We can make repairs at your place or at ours, depending on the circumstances: see us, depend on us.

JOHN DEERE SERVICE
SUPERIORITY: We'll be around when you need us.



