JOHN DEERE
AG & TURF DIVISION

Aercore® Tractor-Mounted Aerators
1000, 1500, and 2000

OMTCU28130 C2

OPERATOR'S MANUAL

JOHN DEERE

Export Version
Litho in U.S.A.

Introduction

Table of Contents

Introduction

Thank You for Purchasing a John Deere Product

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you sell it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

If you have an attachment, use the safety and operating information in the attachment operator's manual along with the machine operator's manual to operate the attachment safely and correctly.

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

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages and learn the controls so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions. A convenient index located at the end of this book will help you to find needed information quickly.

The machine shown in this manual may differ slightly from your machine, but will be similar enough to help you understand our instructions.

RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction the machine will travel when going forward. When you see a broken line (------), the item referred to is hidden from view.

Before delivering this machine, your dealer performed a predelivery inspection to ensure best performance.

Machine Use

This aerator is designed solely for use in customary ground aeration or similar use. 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.

This aerator 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.

Setting fuel delivery beyond published factory specifications or otherwise overpowering will result in loss of warranty protection for this machine.

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

Special Messages

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

CAUTION: Avoid injury! This symbol and text highlight potential hazards or death to the operator or bystanders that may occur if the hazards or procedures are ignored.

IMPORTANT: Avoid damage! This text is used to tell the operator of actions or conditions that might result in damage to the machine.

NOTE: General information is given throughout the manual that may help the operator in the operation or service of the machine.

Product Identification

Record Identification Numbers

AERCORE® Tractor-Mounted Aerators

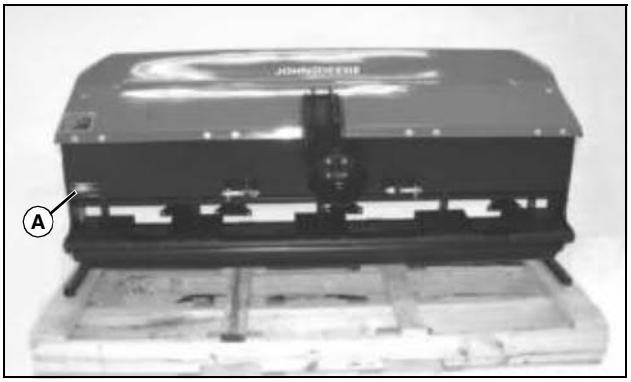
1000, 1500 Serial No. (085001 -)

2000 Serial No. (055001 -)

AERCORE® Tractor-Mounted Aerators

If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

You will need to locate the serial number for the machine and record the information in the spaces provided below.



MX4616

DATE OF PURCHASE:

_____

DEALER NAME:

_____

DEALER PHONE:

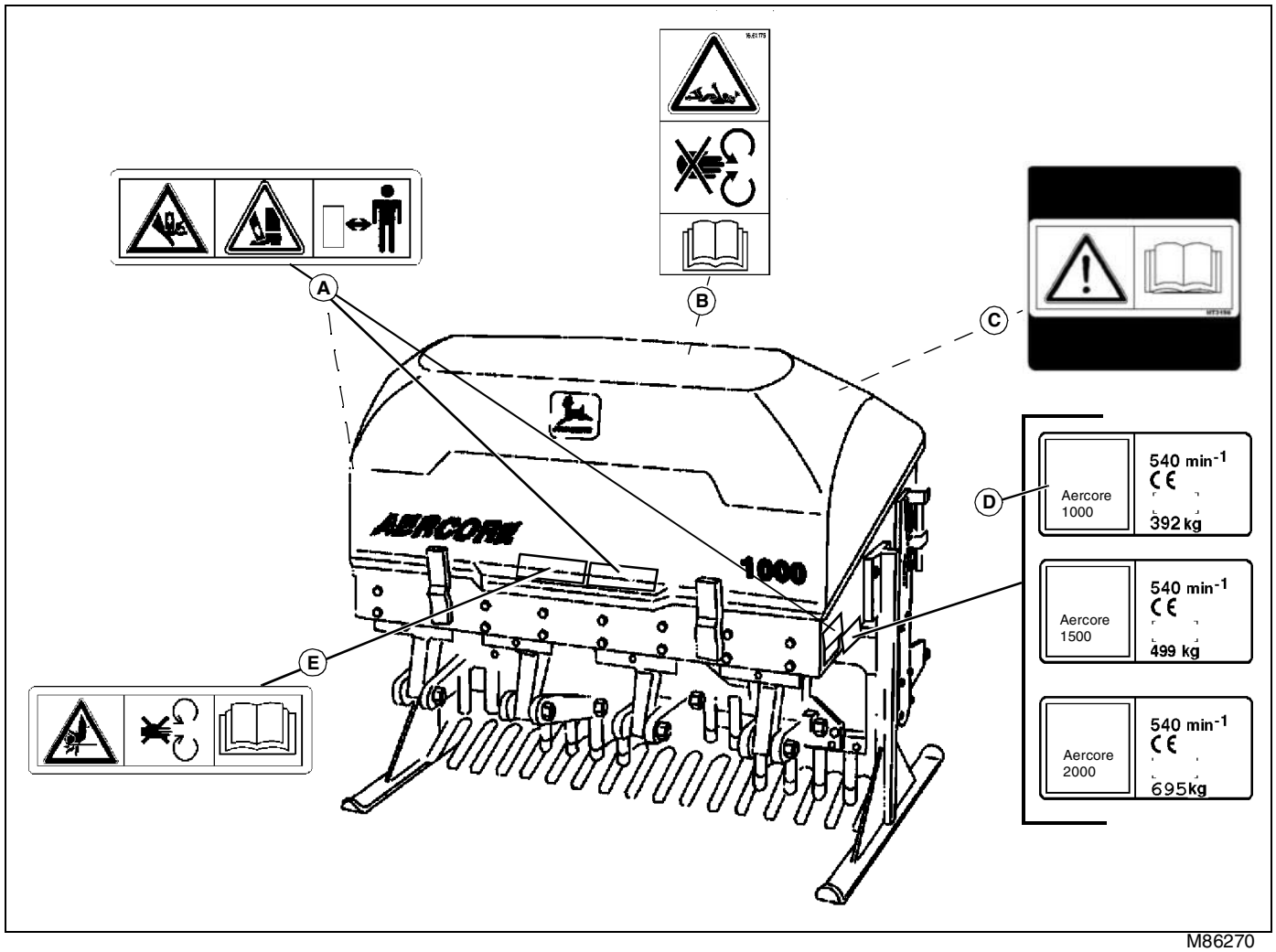
_____

PRODUCT SERIAL NUMBER (A):

_ _ _ _ _ _ _ _ _ _ _ _ _ _

Safety Labels

Safety Label Location



M86270

A- WARNING MT3045
B- DANGER
C- WARNING MT3190
D- CE Certification
E- WARNING MT3083

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 section.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

WARNING MT3190

Read Operator's Manual

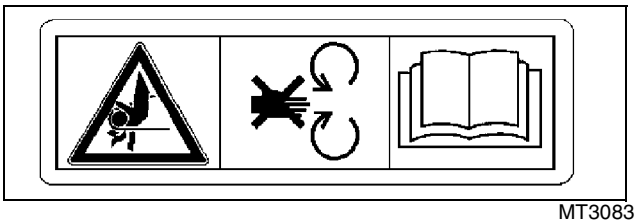
MT3190

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

Safety Labels

WARNING MT3083

Avoid Injury From Getting Caught In Belts



MT3083

- Do not operate aerator without hood in place.
- Stay clear of belts.
- For safe operation, read the operator's manual, and observe all safety rules to avoid accidents.

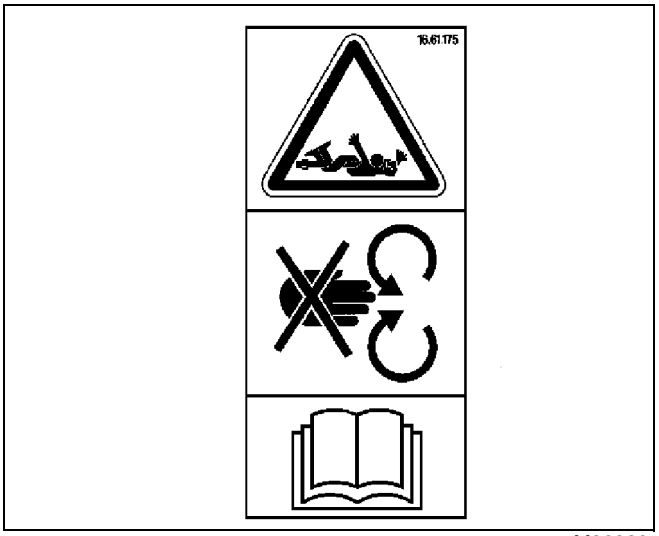
WARNING MT3045

Avoid Injury From Moving Tines

MT3045

- Do not put hands or feet under machine when engine is running.
- Keep bystanders a safe distance away from machine.

Stay Clear of Rotating Drivelines

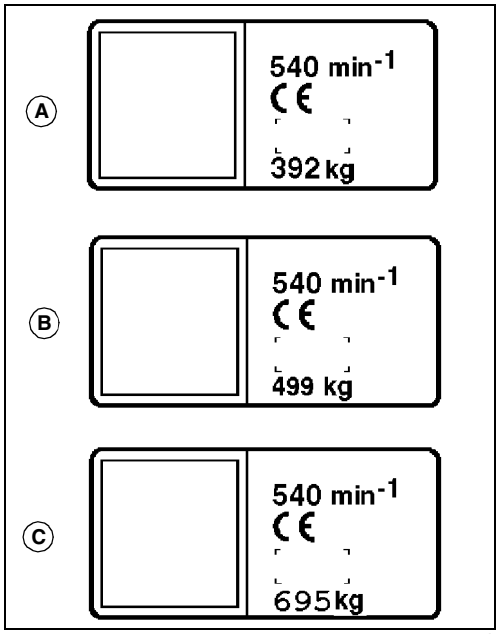


M86220

Picture Note: On powershaft

- Entanglement in rotating driveline can cause serious injury or death.
- Stop the engine and be sure PTO driveline is stopped before getting near it.

CE Certification Label



MT3192, MT3191, TCU51921

A- Aercore 1000

B- Aercore 1500

C- Aercore 2000

This information is provided on your machine to indicate the machine is certified and in compliance with European Directive Standards: 2006/42/EC.

Safety

Read Safety in Machine Operator's Manual

Read the general safety operating precautions in your machine operator's manual for additional safety information.

Operator Training Required

• Read the operator's manual and other training material. If the operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. This publication is available in other languages.

• Become familiar with the safe operation of the equipment, operator controls, and safety signs.

• All operators and mechanics should be trained. The owner of the machine is responsible for training the users.

• Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.

• The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people, or property.

• Operate the machine in an open, unobstructed area under the direction of an experienced operator.

Operation

• Only allow responsible adults, who are familiar with the instructions to operate the machine. Local restrictions may restrict the age of the operator.

• Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Replace faulty silencers. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate.

• Be sure all drives are in neutral and parking brake is locked before starting engine. Only start engine from the operator's position.

• Do not change the engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.

• Check brake action before you operate. Adjust or service brakes as necessary.

• Stop machine if anyone enters the area.

• If you hit an object or if abnormal vibration occurs, stop and inspect the machine. Make repairs before you operate. Keep machine and attachments properly maintained and in good working order.

• Do not leave machine unattended when it is running.

• Only operate during daylight or with good artificial light.

• Raise the aeration head and stop tining action before crossing surfaces other than grass.

• Use only accessories and attachments approved by the manufacturer of the machine. Keep safety labels visible when installing accessories and attachments.

• Do not operate machine if you are under the influence of drugs or alcohol.

• Check before each use that operator presence controls are functioning correctly. Test safety systems. Do not operate unless they are functioning correctly.

• Do not wear radio or music headphones. Safe service and operation require your full attention.

• Disengage drive to attachments when transporting or not in use.

• Reduce the throttle setting during engine run-out and, if the engine is provided with a fuel shut-off valve, turn the fuel off at the conclusion of mowing.

• When machine is left unattended, stored, or parked, lower the aerati0n head unless a positive mechanical lock is used.

Parking Safely

1. Stop machine on a level surface, not on a slope.
2. Disengage PTO.
3. Lock park brake.
4. Stop engine.
5. Remove key.
6. Install support legs and lower attachment completely.
7. Before you leave the operator's station, wait for engine and all moving parts to stop.

Be Familiar with Work Area

• Identify locations of buried irrigation and electrical cables.

• Identify locations of sprinkler heads, fairway markers and other obstacles.

Avoid Tipping

• Do not operate where machine could slip or tip.

• Stay alert for holes and other hidden hazards in the terrain.

• Operate up and down a hill - not across. Be careful when you change direction on a slope.

• Keep away from drop-offs.

• Slow down before you make a sharp turn or operate on a slope.

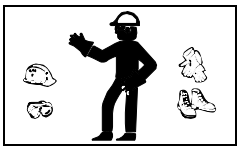
Protect Children

• Tragic accidents can occur if the operator is not alert to the presence of children. Keep children indoors when the machine and attachment are operated and under the watchful care of another responsible adult.

• Never assume that children will remain where you last saw them. Stay alert to the presence of children. Turn the machine off if a child enters the work area.

• Do not let children or an untrained person operate the machine.

• Do not carry or let children ride on any attachment or machine even with the attachment off. Do not tow children in a cart or trailer.



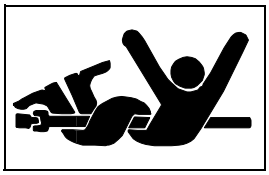
Wear Appropriate Clothing

• Always wear safety goggles, or safety glasses with side shields when operating the machine.

• Wear close fitting clothing and safety equipment appropriate for the job.

• While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.

• Wear a suitable protective device such as earplugs. Loud noise can cause impairment or loss of hearing.

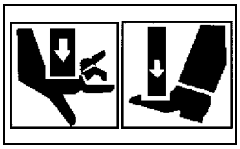


Stay Clear of Rotating Drivelines

Entanglement in rotating driveline can cause serious injury or death.

• Wear close fitting clothing.

• Stop the engine and be sure PTO driveline is stopped before getting near it.



Avoid Injury from Moving Parts

• Keep hands, feet, clothing and other objects away from moving parts.

• Do not attempt to remove any obstruction from tine area while aerator is in motion.

• Keep hands and feet away from the tine area while the engine is running. When the engine is running, tining action will begin as soon as the aeration head begins to lower.

Practice Safe Maintenance

• Only qualified, trained adults should service this machine.

• Understand service procedure before doing work. Keep area clean and dry.

• Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.

• Never lubricate, service or adjust the machine or attachment while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.

• Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.

• Lower any attachment completely to the ground or to an existing attachment mechanical stop before servicing the attachment. Disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.

• Disconnect battery or remove spark plug wire (for gasoline engines) before making any repairs.

• Before servicing machine or attachment, carefully release pressure from any components with stored energy, such as hydraulic components and springs.

• Release hydraulic pressure by lowering attachment or cutting units to the ground or to a mechanical stop and move hydraulic control levers.

• Securely support any machine or attachment elements that must be raised for service work. Use jack stands or lock service latches to support components when needed.

• Never run engine unless park brake is locked.

• Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals.

• Check all hardware at frequent intervals to be sure the equipment is in safe working condition.

• Do not modify machine or safety devices. Unauthorized modifications to the machine or attachment may impair its function and safety.

Preparing Vehicle

Compatibility

NOTE: Compatibility listing is for John Deere compact utility tractors only. Other machines may be used if they meet the general machine requirements.

AERCORE® aerators can be used with the following John Deere compact utility tractors:

AERCORE Model	Compatible Machine Models
1000	The Aercore™ 1000 is compatible with a tractor that has a minimum power take-off (PTO) horsepower of 15 (11.2 kW) and is equipped with a Category 1 3-point hitch.
1500	The Aercore 1500 is compatible with a tractor that has a minimum PTO horsepower of 22 (16.4 kW) and is equipped with a Category 1 3-point hitch.
2000	The Aercore 2000 is compatible with a tractor that has a minimum PTO horsepower of 33 (24.6 kW) and is equipped with a Category 1 3-point hitch.

General Machine Requirements

• Inflate machine tires to proper pressure.

• Install proper front ballast. Weight bracket extension kit may be required to hold correct number of weights. See your John Deere dealer for kit.

• PTO horsepower:

  • AERCORE 1000: 11.2 kW (15 hp)

  • AERCORE 1500: 16.4 kW (22 hp)

  • AERCORE 2000: 24.6 kW (33 hp)

• Minimum PTO speed: 540 rpm at rated engine speed.

• Category I, 3-point hitch. Conversion kits are available to allow hook-up to machines with a Category II, 3-point hitch. See your John Deere dealer.

• Cruise control or a speed control kit is recommended. Kits may not be available for all machines. See your John Deere dealer.

Installing

Installing Ballast

CAUTION: Avoid injury! Machine can become unstable when operating with attachment. Ballast is required when the attachment is installed.

When the attachment is removed, also remove any ballast that was added to the machine.

Use only attachments and accessories recommended by the manufacturer.

NOTE: A weight bracket extension kit may be required to hold proper number of suitcase weights. See your John Deere dealer.

AERCORE Model	Recommended Machine Model	Quantity - Size of Suitcase Weights
1000	770, 855	9 - 19 kg (42 lb)
	870	12 - 19 kg (42 lb)
	955	9 - 19 kg (42 lb)
	970	12 - 19 kg (42 lb)
	990	10 - 19 kg (42 lb)
	1070	12 - 19 kg (42 lb)
	4100	9 - 32 kg (70 lb)
	4110, 4115	9 - 32 kg (70 lb)
	4200, 4300, 4400	10 - 32 kg (70 lb)
	4210, 4310, 4410	10 - 32 kg (70 lb)
	4500, 4600, 4700	9 - 32 kg (70 lb)
	4510, 4610, 4710	9 - 32 kg (70 lb)
1500	870, 970, 1070	12 - 19 kg (42 lb)
	955	9 - 19 kg (42 lb)
	990	10 - 32 kg (70 lb)
	4200, 4300, 4400	10 - 32 kg (70 lb)
	4210, 4310, 4410	10 - 32 kg (70 lb)
	4500, 4600, 4700	12 - 32 kg (70 lb)
	4510, 4610, 4710	12 - 32 kg (70 lb)
2000	990	10 - 32 kg (70 lb)
	1070, 4500, 4600, 4700	12 - 32 kg (70 lb)
	4510, 4610, 4710	12 - 32 kg (70 lb)

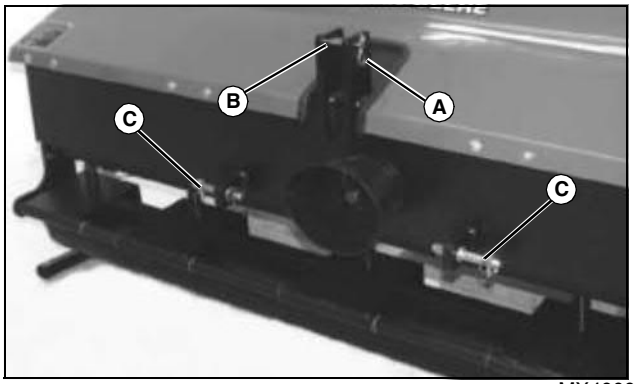
Attaching Aerator to Machine

IMPORTANT: Avoid damage! Check if the hitch being used is CAT1 or CAT2, and verify that the appropriate driveshaft is being used.

- **Only use CAT1 driveshaft with corresponding CAT1 hitch.**
- **Only use CAT2 driveshaft with corresponding CAT2 hitch.**

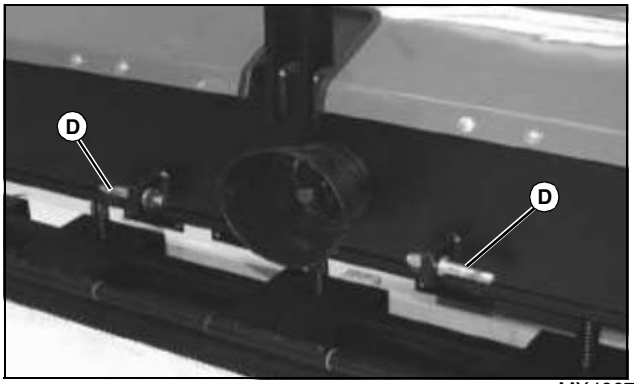
Please consult your John Deere dealer for any additional questions.

1. Prepare the 3-point hitch by loosening the sway links and adjustable lift link.



MX4606

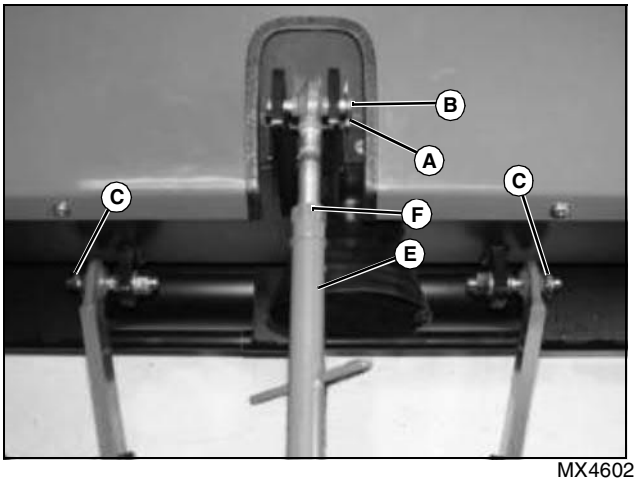
2. Remove and retain spring locking pin (A), drilled pin (B), and quick-lock pins (C).



MX4607

3. Slowly back machine up to aerator so draft arms are aligned for connection to aerator pins (D). Raise hitch if necessary to align draft arms.

4. Park machine safely. (See Parking Safely in the SAFETY section.)



MX4602

5. Slide draft arms onto aerator pins and secure with quick-lock pins (C).

6. Adjust the length of center link (E) as needed. Connect center link to aerator clevis with drilled pin (B) and spring locking pin (A).

7. Tighten the center link and lock nuts (F) at both ends.

8. Adjust the sway links on the lower draft arms to minimize side-to-side sway.

Installing PTO Powershaft

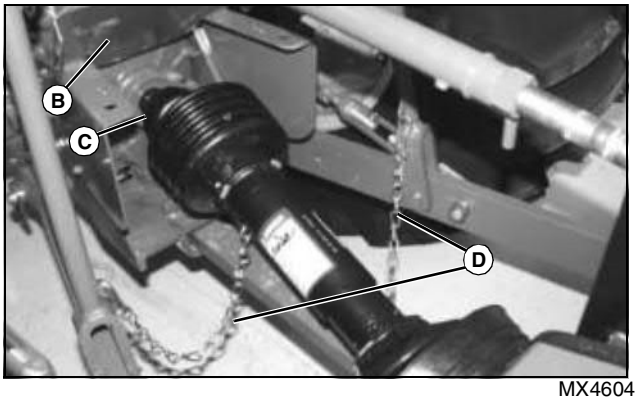
CAUTION: Avoid injury! The powershaft is a two-section telescoping unit. Keep the sections together and horizontal when handling to prevent separation and possible crushing injury from falling parts.

NOTE: If driveshaft has a decal showing direction towards tractor, be certain to install following decal marking.

MX4603

1. Pull and hold back locking collar (A) on powershaft. Slide powershaft onto aerator driveshaft until it locks in place.

2. Slide powershaft back and forth several times to ensure it is securely locked on driveshaft.



MX4604

3. Raise rear PTO shield (B) if equipped.

4. Pull and hold back locking collar (C) on powershaft. Slide powershaft onto rear PTO shaft until it locks in place.

5. Slide powershaft back and forth several times to ensure it is securely locked on rear PTO shaft.

6. Lower PTO shield if equipped.

7. Hook chains (D) to welded loops on draft arms or lift links to prevent powershaft guard from rotating during PTO operation.

Removing Support Legs

1. Start the engine.

2. Raise the aerator to take weight off the support legs, and to obtain clearance below aerator to remove legs.

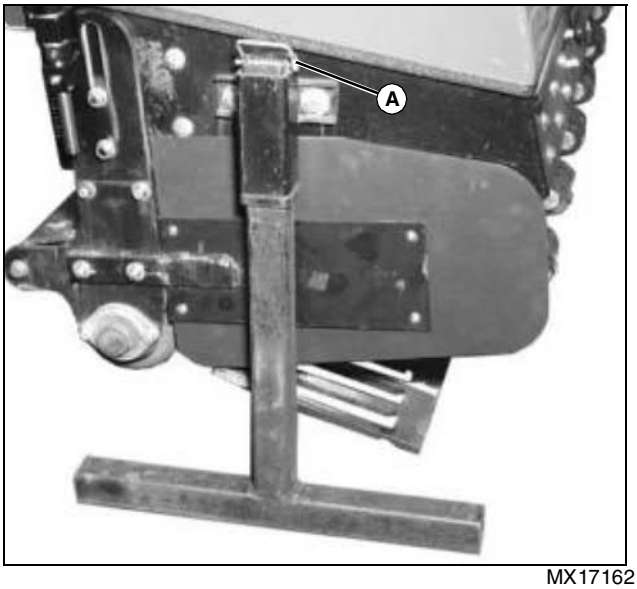
3. Close the speed of drop/lock valve completely.

4. Park machine on a level surface, disengage PTO, lock park brake, stop engine, and remove key.

CAUTION: Avoid injury! Attachment can lower rapidly. Attachment is heavy and can crush.

Keep bystanders, especially children, away when lowering attachment.

Support raised attachment with a mechanical stop or lower completely to the ground before servicing.



MX17162

5. Remove spring locking pin (A) securing the support legs to the aerator.

IMPORTANT: Avoid damage! Proper adjustment of center link is to end up with storage stands sitting flat on the ground. Adjusting to tip aerator more forward than this may result in damage to the driveshaft and gearbox.

6. Lower support legs from aerator, and store the support legs and spring locking pins for future use to remove the aerator.

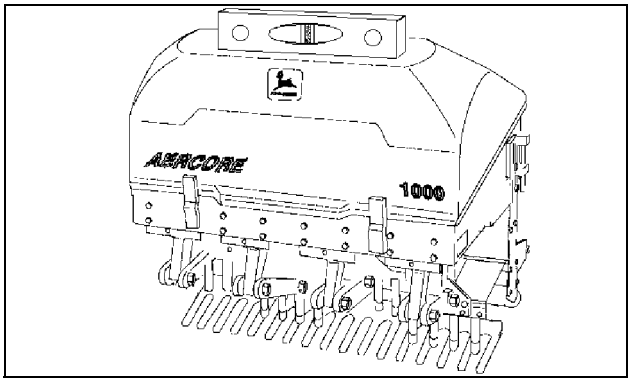
Leveling the Aerator

CAUTION: Avoid injury! Attachment can lower rapidly. Attachment is heavy and can crush.

Keep bystanders, especially children, away when lowering attachment.

Support raised attachment with a mechanical stop or lower completely to the ground before servicing.

IMPORTANT: Avoid damage! Aerator must be leveled to ensure proper hole placement or turf may be damaged.



M86270A

1. Place a level on the aerator hood.

NOTE: Aerator should be level side to side when raised.

2. Adjust the 3-point hitch adjustable lift link to level the aerator.

Removing

Preparing for Removal

1. Drive machine to a firm, level surface for removal and storage of the aerator.

2. Adjust the speed of drop/lock valve to provide a slow lowering speed for the aerator.

IMPORTANT: Avoid damage! Support legs must be installed before removing aerator from machine or when parking machine with aerator installed. Do not lower aerator to ground without support legs installed or tines and turf guards can be damaged.

3. Raise the aerator to obtain clearance to install support legs.

4. Close the speed of drop/lock valve completely.

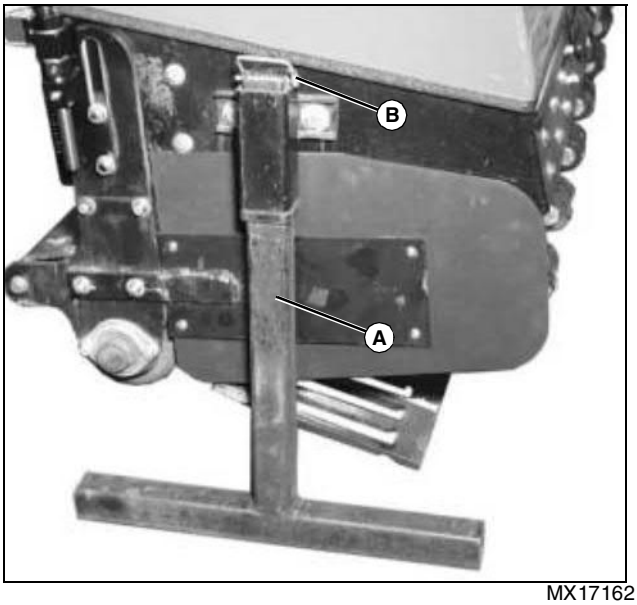
5. Park machine safely. (See Parking Safely in the SAFETY section.)

Installing Support Legs

CAUTION: Avoid injury! Attachment can lower rapidly. Attachment is heavy and can crush.

Keep bystanders, especially children, away when lowering attachment.

Support raised attachment with a mechanical stop or lower completely to the ground before servicing.



MX17162

1. Install support leg (A) on both sides of aerator and secure with spring locking pin (B).

NOTE: Machine does not need to be running to lower aerator.

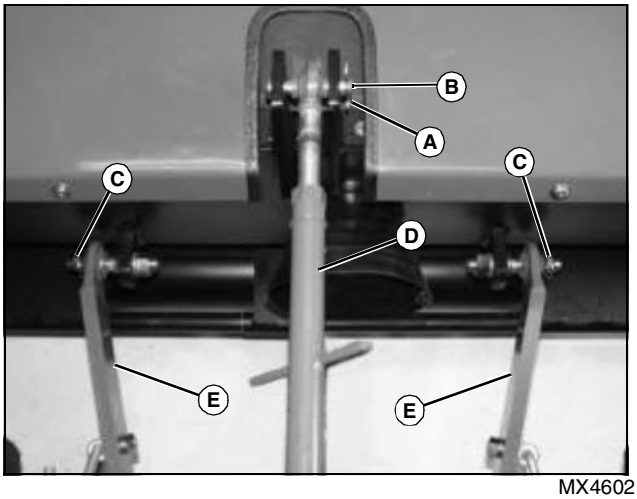
2. Open the speed of drop/lock valve slightly.

3. Lower aerator slowly until support legs are resting on the ground.

Disconnecting Aerator from Machine

1. Loosen the center link, sway links, and adjustable lift link on the 3-point hitch.

2. Disconnect driveshaft.

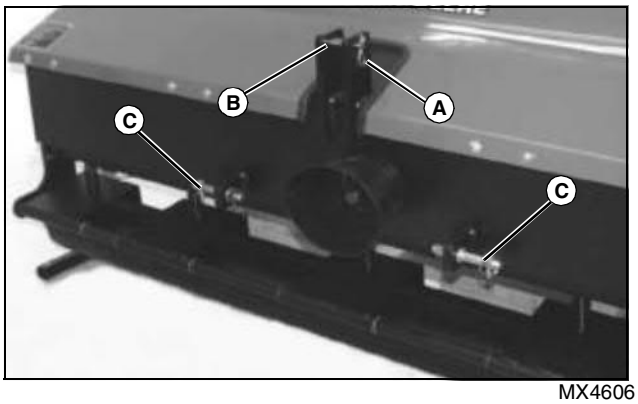


MX4602

3. Remove and retain spring locking pin (A), drilled pin (B), and quick-lock pins (C).

4. Place center link (D) in storage hook on 3-point hitch.

5. Slide draft arms (E) off the aerator pins.



MX4606

6. Install pins (A), (B), and (C) for storage.

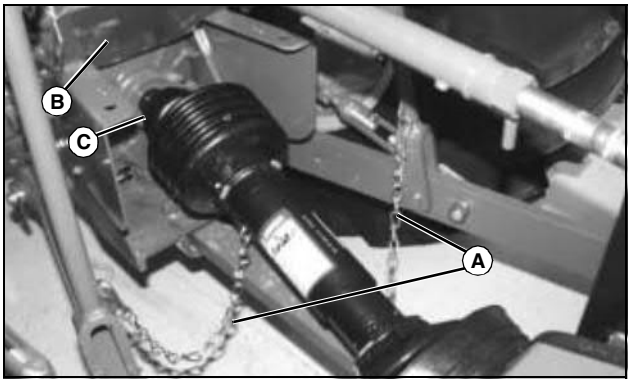
7. Adjust the sway links on the lower draft arms to minimize side-to-side sway.

8. Drive machine slowly away from aerator. Park machine safely. (See Parking Safely in the SAFETY section.)

CAUTION: Avoid injury! Additional ballast may be needed when using attachments. When attachment is raised, drive slowly over rough ground, regardless of how much ballast is used.

9. Remove ballast

Removing PTO Powershaft



MX4604

1. Unhook chains (A) from draft arms or lift links.

2. Raise PTO shield (B) if equipped.

CAUTION: Avoid injury! PTO driveline has two shafts which separate if allowed to slide apart.

3. Pull and hold back locking collar (C) on powershaft. Slide powershaft off rear PTO shaft.

MX4603

4. Pull and hold back locking collar (D) on powershaft. Slide powershaft off aerator driveshaft.

5. Lower the machine rear PTO shield if equipped.

Operating

Daily Operating Checklist

- ❑ Lubricate powershaft.
- ❑ Check belt tension.
- ❑ Check for loose or broken tines.
- ❑ Check for loose or missing hardware.
- ❑ Check for bent or damaged aerating links.
- ❑ Check tine holders and ram for damage.

Operating Tips

IMPORTANT: Avoid damage! Always raise aerator first and then disengage PTO. Do not reduce PTO rpm when aerator is temporarily raised out of the ground.

Around Greens and Teeboxes:

• Survey the green before aerating.

• Operate with PTO speed at 540 RPM. Do not operate at speed below or above this speed.

• Plan your direction to minimize turning and maneuvering around hazards at the end of a pass.

• Make the initial pass across the center of the green and work your way to the outside.

• Keep PTO engaged and operating at 540 RPM when turning tractor around to make another pass. Raise aerator only high enough to lift turf guards off the ground. Do not raise aerator to full 3 point hitch lift height.

• Maintain consistent spacing while aerating a green by selecting a marking reference before starting.

On Fairways:

• Mark and/or flag all sprinkler heads and other items that could be damaged or cause damage to the aerator.

• Start on the outside perimeter of the fairway and work your way to the inside.

• Check for sand traps, water or other hazards before starting.

• Plan your direction to minimize turning and maneuvering around hazards at the end of a pass.

• Avoid sharp turns while aerating.

• Keep PTO engaged and operating at 540 RPM when turning tractor around to make another pass. Raise aerator only high enough to lift turf guards off the ground. Do not raise aerator to full 3 point hitch lift height.

Training:

• Practice before operating the aerator for the first time is critical to quality performance. Read the operator manual to learn operating procedures.

• Practice in an open field to become familiar with operating techniques necessary to maintain correct speed for proper hole spacing and hole quality.

General Operating Practice:

• Do not make sharp turns. Lift aerator out of ground to turn at the end of fairway.

• Wait to aerate if the soil is too hard and compacted. Aerate after rain or watering to achieve best results.

• Always carry extra tines and tools to replace a tine if it breaks while you are aerating.

Aeration Hole Quality

• Coring Depth: Poor quality can result if the depth is set too deep. Decrease the tine depth by 6 mm (1/4 in.) to 12.7 mm (1/2 in.) and check for improved hole quality.

• Tine Type: Closed tubular tines will provide better quality holes than open-side tines. Use open-side tines in applications to overcome plugging in high sand-content soils or wet conditions.

• Attachment Angle: Support legs provide the correct attaching angle at hook up for most conditions. Adjusting the angle too much or too little will

be detrimentally affect hole quality. Adjusting angle too much can result in damage to the powershaft and/or gearbox.

• Turf Guard: The turf guard needs to be firmly on the surface during operation or lifting may occur. This lifting is especially prevalent in turf with poor root conditions. Excessive turf guard pressure can cause marking in soft turf.

• Damaged Aerating Linkage: If the hole quality is bad in one aeration linkage path only, then that associated linkage may have a damaged or missing part. First, inspect the linkage for any missing or loose hardware. Sometimes damaged linkage will make unusual noise. Check for bent tines. Straighten or replace tines if needed. Replace linkage if needed.

• Hole Spacing: Hole spacings greater than 76.2 mm (3 in.) can reduce the hole quality in some turf conditions.

• Hard Soil: The aerator will raise up off the turf in hard soils conditions and the hole quality may be less than desirable.

• Do not adjust hole depth deeper than what tines can penetrate, as damage can be incurred to all moving parts as well as Aercore frame.

Pre-Operating Adjustments

• Level the aerator side to side.

• Adjust the aerator attachment angle side to side if necessary.

IMPORTANT: Avoid damage! Do not raise 3-point hitch above 3/4 height while PTO is engaged or excessive wear to powershaft can occur. Raise to full height only when transporting the aerator with the PTO disengaged.

• Set the rockshaft adjustable depth stop to the 3/4 position to prevent aerator from raising fully.

• Adjust the speed of drop/lock valve so aerator lowers fairly quick without striking the ground abruptly.

• Raise aerator slightly off the ground. Raise engine speed so that PTO speed is set to 540 RPM, and engage PTO. Check all moving parts for rubbing or interference. Disengage PTO, and turn off machine. Make any necessary adjustments.

Checking Machine Ground Speed

NOTE: Machine ground speed directly affects forward hole spacing, quantity of holes, and rate of coverage. Operating within 2 - 4.8 km/h (1.2 - 3 mph) is recommended for most soil conditions.

1. Select a location to test ground speed.

2. Measure a test area 30.5 m (100 ft) in length.

3. Operate machine at required engine speed for PTO to operate at 540 RPM. Select a low speed and drive machine 30.5 m (100 ft). Record the time required to travel the distance.

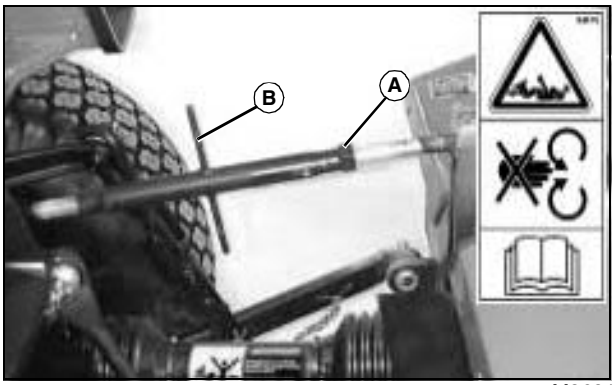
4. Make three passes, recording the time for each pass. The average time should be 30 - 40 seconds for most conditions. Average times for operating at the low and high end of the recommended speed range are as follows:

- at 2 km/h (1.2 mph), average time traveling the test distance should be 57 seconds.
- at 4.8 km/h (3 mph), average time traveling the test distance should be 23 seconds.

5. Adjust speed accordingly to achieve the best results.

Adjusting Attachment Angle

NOTE: The aerator support legs provide the correct attaching angle for most soil conditions.



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1. Loosen locking nut (A) and turn center link (B) to increase or decrease aerator angle.

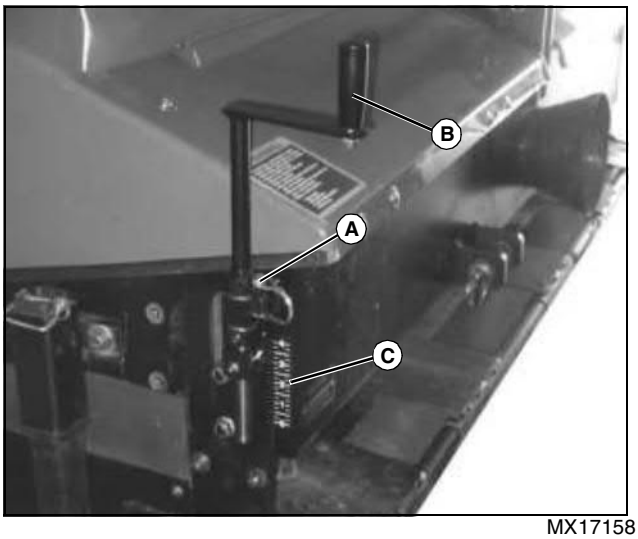
2. Tighten locking nut to lock center link in position.

Adjusting Tine Depth

NOTE: Before determining tine depth adjustment is needed, make sure adjustment roller and turf guards were contacting the ground during operation of the aerator. If aerator is not lowered completely, tine depth will be less than expected.

Tine depth can be adjusted to a maximum 10 cm (4 in.). Depth adjustment must be the same on both sides of aerator. Damage may result if depth adjustment is set deeper than what tines can penetrate the ground.

1. Raise aerator so roller is off the ground before attempting to adjust depth.



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2. Remove spring locking pin (A) securing the depth control position at both sides of aerator.

3. Turn adjusting handle (B) to adjust up or down to desired depth. Use depth indicator label (C) to determine tine depth. The adjustment must be equal on both sides.

4. Install spring locking pin (A) to secure depth control arms in position at both sides of aerator.

Suggest:

If the above button click is invalid.

Please download this document

first, and then click the above link

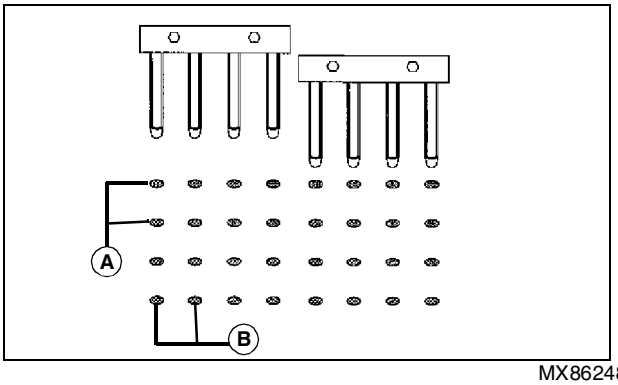
to download the complete manual.

Thank you so much for reading

Hole Coverage and Spacing

NOTE: Refer to the table in the Specifications section, Operating Speed and Hole Productivity Chart, for specific aeration hole output for certain speeds.

Adjusting Holes-Per-Square-Foot



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Increasing the ground speed will reduce the number of holes per square foot, but will increase forward hole spacing (A) and increase the square feet aerated per hour.

Changing the tine holder from 4x holders to 3x holders will increase the tine hole spacing (B) and decrease the number of holes per square foot.

Operating the Aerator

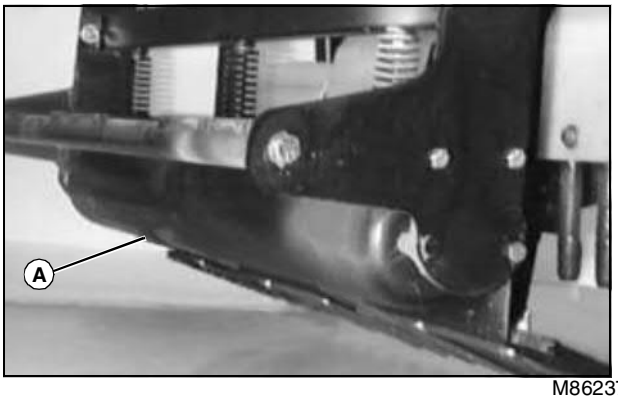
IMPORTANT: Avoid damage! Always raise aerator first and then disengage PTO. Do not reduce PTO rpm when aerator is temporarily raised out of the ground.

1. Complete the pre-operating adjustments for the aerator and remove the support legs if installed.
2. Start the engine.
3. Raise aerator so turf guards are slightly off the ground.
4. Set machine range shift lever to low gear.
5. Set machine at required engine speed for PTO to operate at 540 RPM.
6. Unlock the park brake.
7. Obtain proper ground speed.

NOTE: Operate with PTO speed at 540 RPM. Do not operate at speed below or above this speed.

8. Engage rear PTO.
9. Engage cruise control or optional speed control kit, if equipped, to maintain consistent ground speed.

IMPORTANT: Avoid damage! Adjustment roller must make contact with turf surface for proper operation. Roller coming off the ground indicates tine depth is adjusted too deep. Damage to aerator can occur if depth is adjusted deeper than what tines can penetrate.



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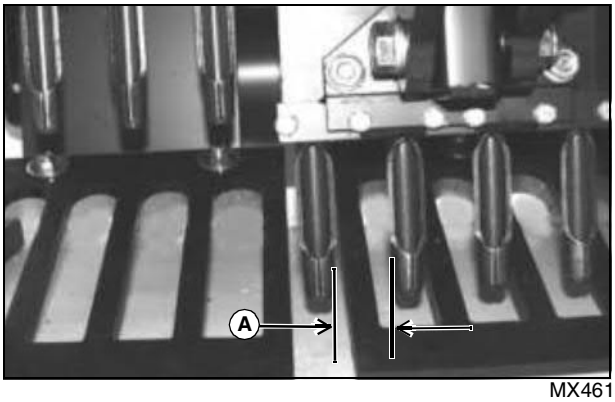
10. Lower aerator so adjustment roller (A) contacts the ground by moving 3-Point raise/lower lever completely forward.
11. Maintain engine speed for PTO to operate at 540 RPM.
12. To raise the aerator at the end of a pass:

    a. If turning around to make another pass, raise aerator just high enough for turfguards to clear the ground, do not disengage PTO and maintain PTO speed of 540 RPM.

    b. If not turning around to make another pass, raise aerator and then immediately disengage PTO.

Selecting the Correct Tine Holder



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NOTE: Different tine holders will require different turf guards to be installed. See your John Deere dealer.

Tine holders are available in three sizes to accommodate different hole spacing requirements. Hole spacing (A) is the distance between each tine. See your John Deere dealer for tine holder kits.

4X Tine Holder - Hole spacing of 61 mm (2.4 in.). Two styles available, one for 19 mm (3/4 in.) open-sided tines and one for 10 mm (3/8 in.), 12.7 mm (1/2 in.), and 16 mm (5/8 in.) tines in either solid, tubular or open-sided.

3X Tine Holder - Hole spacing of 81 mm (3.2 in.). Two styles available, one for 19 mm (3/4 in.) open-sided tines and one for 10 mm (3/8 in.), 12.7 mm (1/2 in.), and 16 mm (5/8 in.) tines in either solid, tubular or open-sided.

Mini-Tine Holder - Used for holding mini-tines only.