

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

**Blower and Rear Hopper
Dump From Seat 14 Bushel**

OMTCU29193 J0

OPERATOR'S MANUAL



JOHN DEERE

Original Instruction

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North American Version

Litho in U.S.A.



INTRODUCTION

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Introduction

Using Your Operator's Manual

Read this entire operator's manual, especially the safety information, before operating.

This manual is an important part of your machine. Keep all manuals in a convenient location so they can be accessed easily.

Use the safety and operating information in the attachment operator's manual, along with the machine operator's manual, to operate and service the attachment safely and correctly.

If your attachment manual has a section called Preparing the Machine, it means that you will have to do something to your tractor or vehicle before you can install the attachment. The Assembly and Installation sections of this manual provide information to assemble and install the attachment to your tractor or vehicle. Use the Service section to make any needed adjustments and routine service to your attachment.

If you have any questions or concerns with the assembly, installation, or operation of this attachment, see your local John Deere dealer or call the John Deere Customer Contact Center at 1-800-537-8233 for assistance.

Warranty information on this John Deere attachment can be found in the warranty that came with your John Deere tractor or vehicle.

Product Identification

Product Compatibility

The 14 Bushel Dump From Seat (DFS) Material Collection System is compatible with the ZTrak models:

- Z820A, Z830A, Z840A, Z850A, Z860A
- Z920A, Z925A, Z930A, Z950A, Z960A, Z970A

PRODUCT IDENTIFICATION

Record Identification Numbers

Blower

Serial Number (040001-)

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 (A) for the attachment. Record the information in the spaces provided below.



MX22809

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT SERIAL NUMBER (A):

SAFETY LABELS

Safety Labels



Understanding The Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol.

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

WARNING - M118454



M118454

Rotating Blade -Thrown Objects

- Operate blower with entire grass catcher secured in place.

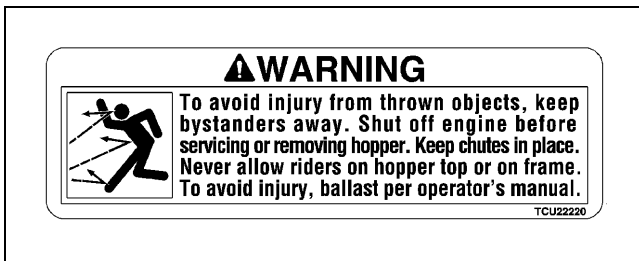
DANGER



M146238

- Bagger may impair rear vision; look down and behind before and while backing.

WARNING



TCU22220

- To avoid injury from thrown objects, keep bystanders away. Shut off engine before servicing or removing hopper. Keep chutes in place. Never allow riders on hopper top or on frame. To avoid injury, ballast per operator's manual.

CAUTION - TCU16753



TCU16753

- To avoid injury from crushing, keep hands and fingers away from this area.

Safety

Read Safety in Machine Operator's Manual

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

Operating Safely

Read, understand and follow all instructions in this attachment manual, the machine operator's manual and safety signs on equipment before starting. Use proper front ballast. Remove ballast when the material collection system is removed.

Hopper extends beyond machine. Be aware of surrounding objects when making short turns.

Do not operate material collection system unless entire grass catcher is fastened in place with hopper securely installed.

Do not let anyone ride on the mower or material collection system. Riders are subject to injury such as being struck by foreign objects or being thrown off. Riders may obstruct the operator's view and cause a collision.

Before hopper removal or installation:

- Stop mower.
- Disengage mower or PTO.
- Stop engine and remove key.
- Wait for engine and all moving parts to stop before leaving the operator seat.

Before backing up machine:

- Stop machine.
- Look behind hopper for children.
- Keep bystanders away when unloading material collection system.

Operate safely on slopes:

- Empty MCS when half full.
- Do not operate on steep slopes.
- Before turning, slow down.
- Avoid sudden starts and stops.

SAFETY

- Do not park machine with material collection system on slopes.

Hose Maintenance:

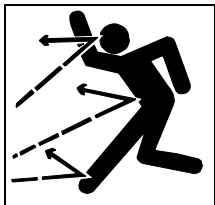
- Hose is subject to wear and deterioration.
- Check hose frequently; replace when necessary.
- Use John Deere hose or equivalent to comply with safety specifications.

Parking Safely

1. Stop machine on a level surface, not on a slope.
2. Disengage mower blades or any other attachments.
3. Lower attachments to the ground.
4. Lock the park brake.
5. Stop the engine.
6. Remove the key.
7. Wait for engine and all moving parts to stop before you leave the operator's seat.
8. Close fuel shut-off valve, if your machine is equipped.
9. Disconnect the negative battery cable or remove the spark plug wire(s) (for gasoline engines) before servicing the machine.

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.



Avoid Injury From Thrown Objects

- When operating the vehicle with the MCS attachment installed make sure all chutes and hoses are securely in place. Keep hopper closed or MCS in operating position.
- Stop the engine and wait for all moving parts to stop before removing or lifting any attachment components.

- Avoid injury from impeller blades and thrown objects. Remove attachment when operating vehicle in side discharge mode. Make sure deflector shield is in place on mower deck if attachment is removed.



Avoid Injury From Rotating Blades

- Keep hands and feet away from rotating blades and blower assembly when engine is running.

- Stop engine and wait for moving parts to stop before servicing components.
- Do not operate MCS or blower unless all attachment components are in place and latched.

Practice Safe Maintenance

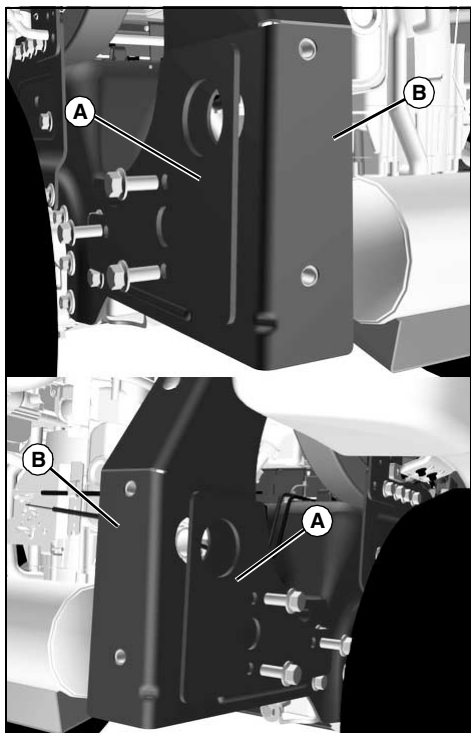
- Only qualified, trained adults should service this machine.

- 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

Preparing Vehicle

Verify Frame Member Reinforcement



MX19962, MX2965a

The assembly section of this manual refers to the removal and installation of side plates (A) and reinforced frame members (B).

Determine if mower is equipped with reinforced frame members. If not, parts (TCA19292 and TCA19293) must be ordered and installed on mower prior to installing MCS.

- Reinforced frame members and side plates are not necessary on ZTrak Estate series.
- Reinforced frame members are factory installed on ZTrak Pro series models listed below. Removal of frame members and installation of side plates is not necessary.
 - Z810A through Z850A - serial numbers 020001 and above.
 - Z860A
 - Z900A Series
- Confirm that mower is equipped with reinforced frame members by measuring material thickness:
 - Reinforced frame members are 4.55 mm (3/16 in.) thick.
 - Non-reinforced frame members are 3.42 mm (1/8 in.) thick.

Checking Tire Pressure

Check tire pressure of machine before installing hopper. See your machine operator's manual.

Installing Proper Mower Blades

IMPORTANT: Avoid damage! When replacing mower blades, always use genuine John Deere Service Parts.

- For best performance, always use correct mower blade for job being performed.
- Always follow safety and service instructions in the machine operator's manual when changing mower blades.

For maximum performance from your material collection system (MCS), install the correct mower blades for your application:

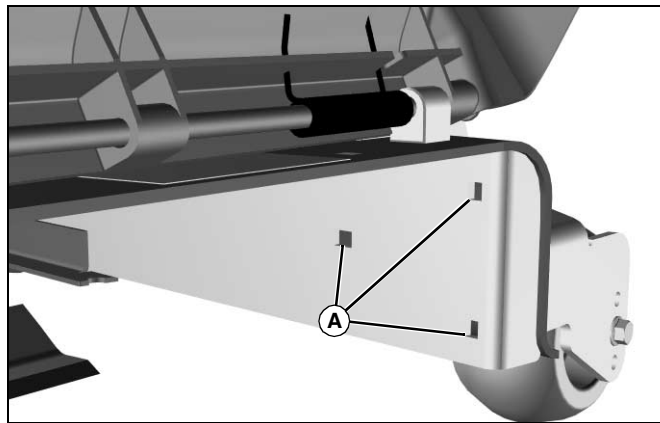
- Mulching Blades - Not for use with MCS.
- Standard Blades - Standard blades are designed for bagging, side discharging, and all mowing conditions.

Installing Mounting Bracket for MCS Blower



CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

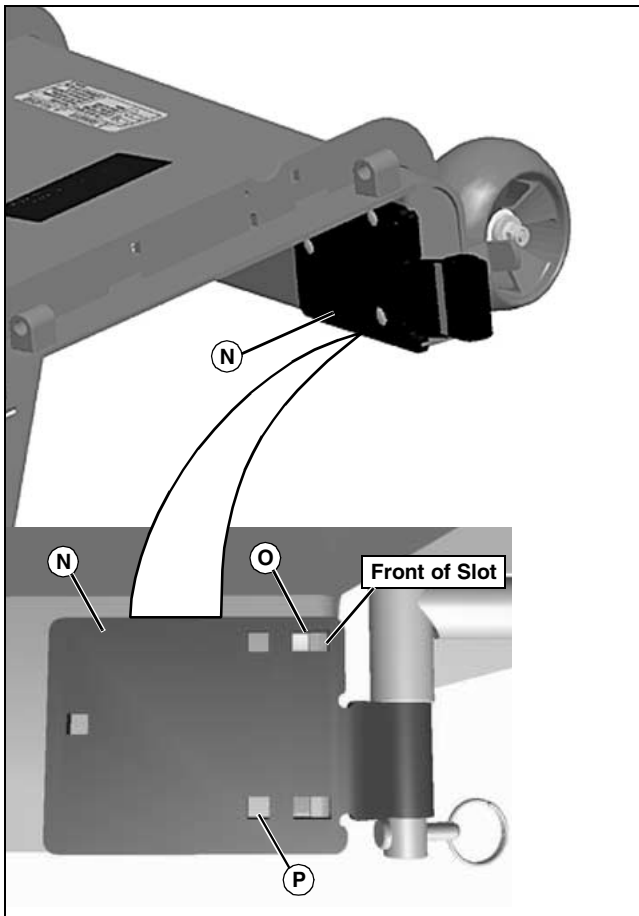
- Disconnect spark plug wire(s) or battery negative (-) cable to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.



MX25142

1. Lift discharge chute up and locate mounting holes (A) for front bracket.

PREPARING VEHICLE

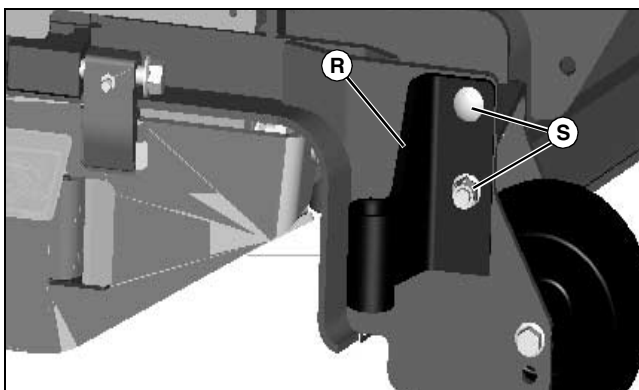


MX23678, MX22841

Picture Note: Hardware removed for clarity. Position bracket as shown with blower pivot tube toward bottom.

2. Position front pivot bracket (N) flush with deck.
3. Install and tighten three M8 X 25 carriage bolts and locknuts in locations listed below:
 - 48 in. deck located in back of slot (O)
 - 54 in. deck located in the middle of slot (O)
 - 60 in. deck is located front of slot (O).
 - 72 in. deck is location (P).

Bracket Assembly for all Mulch on Demand Decks.

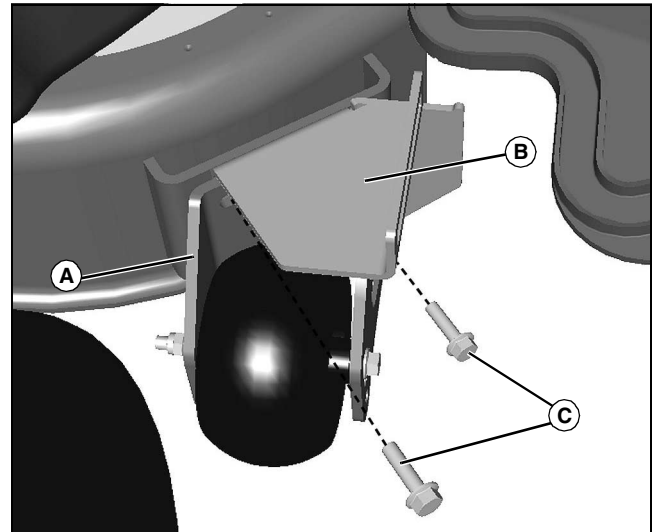


MX26037

1. Position front pivot bracket (R) flush with outside scalp wheel frame.

2. Install and two M8 X 25 carriage bolts (S) and locknuts, and secure bracket into place.

Install Blower Support Bracket



MX47240

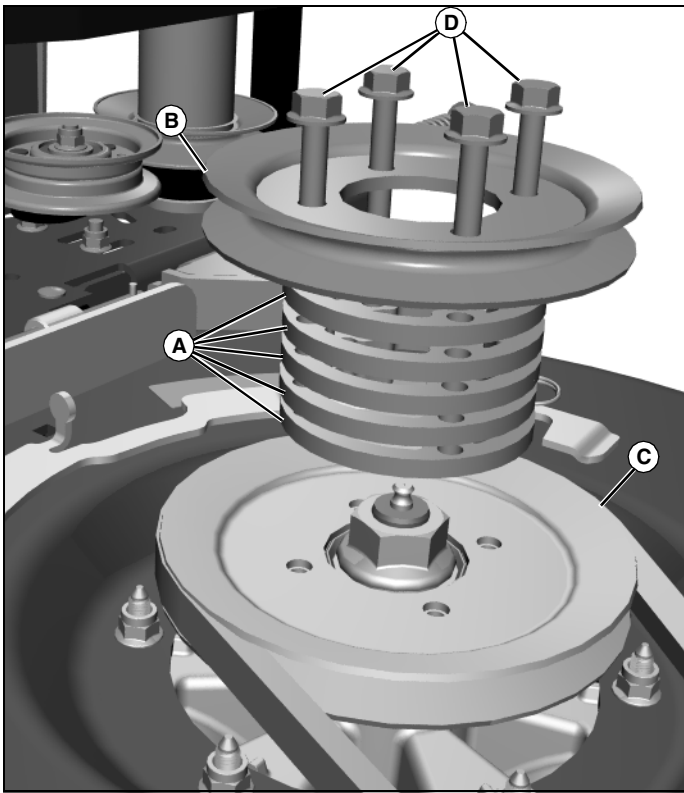
Picture Note: Z800/Z900 Series shown

1. Remove screws and rear right anti scalp wheel assembly (A) from mower deck.
2. Position blower support bracket (B) in place flush against deck.
3. install anti scalp wheel onto bracket and secure in place with new provided M8x30 screws (C).

Install Pulley and Spacer

1. Remove belt shield on discharge chute side of mower deck.

PREPARING VEHICLE



MX25080

2. Install five spacers (A) and extra pulley (B) on sheave (C) using four M8x50 flange head bolts (D), and tighten to 24 N•m (18 lb-ft).

Install New Gate (Mulch on Demand Mower Decks Only)

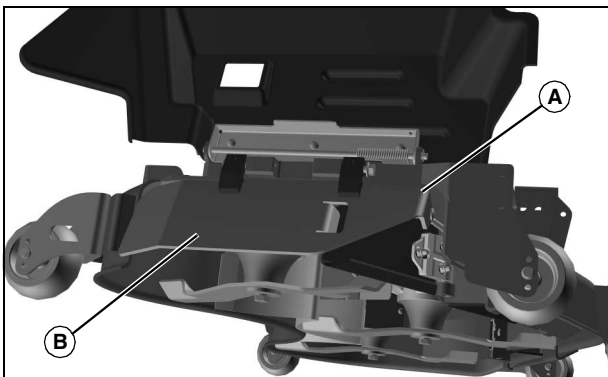
1. Park machine safely. (See Parking Safely in the SAFETY section.)



CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

- Disconnect spark plug wire(s) or battery negative (-) cable to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

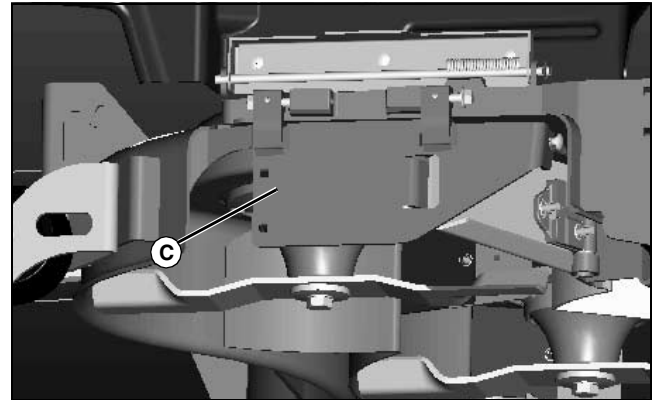
2. Lift discharge chute up.



MX25143

3. Remove link assembly (A).

4. Remove discharge gate (B).

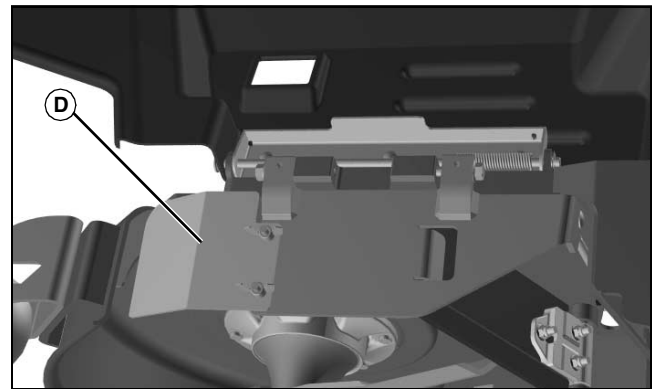


MX26043

5. Install new gate (C) and attach link assembly.

Gate Extension for MCS Gate

NOTE: Gate extension must be installed if machine is operated without MCS blower.

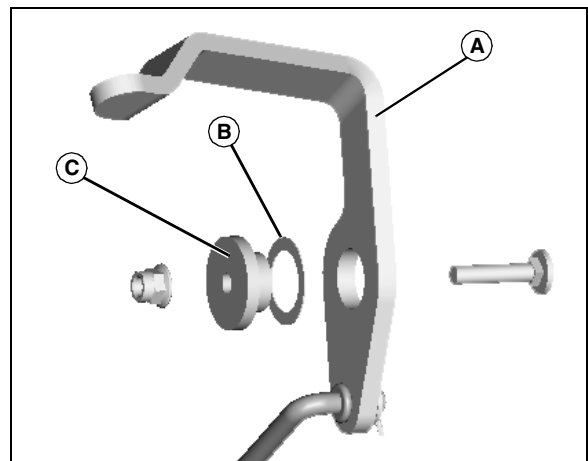


MX25143

1. Install gate extension (D) with hardware and secure in place.

Install Mulch-On-Demand Position Lever (Mulch on Demand Mower Decks Only)

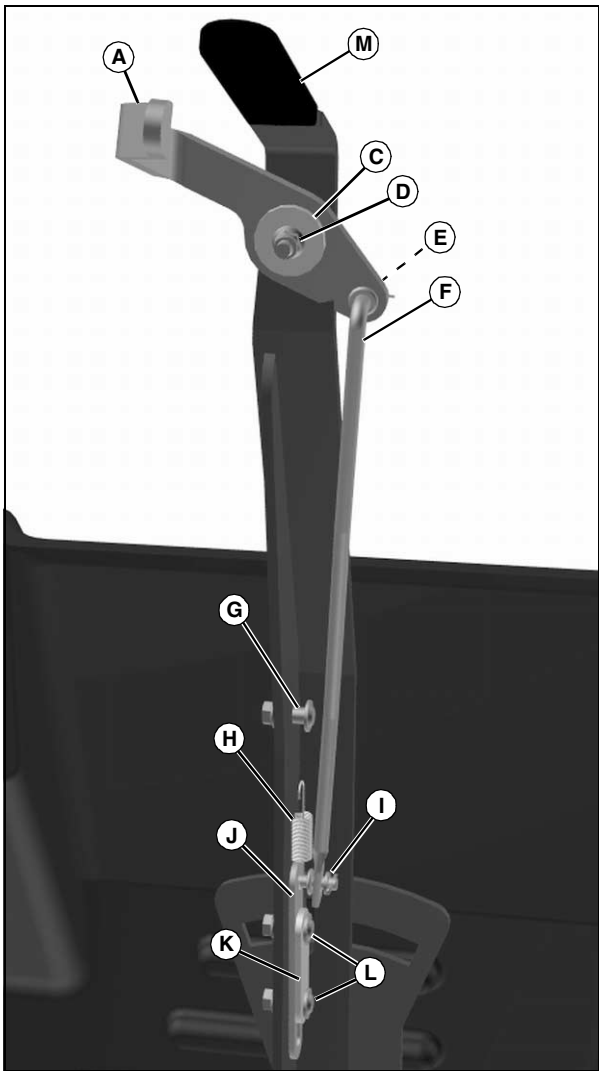
1. Park machine safely. (See Parking Safely in the SAFETY section.)



MX26039

2. Place shim washer (B) onto Insert bushing (C).

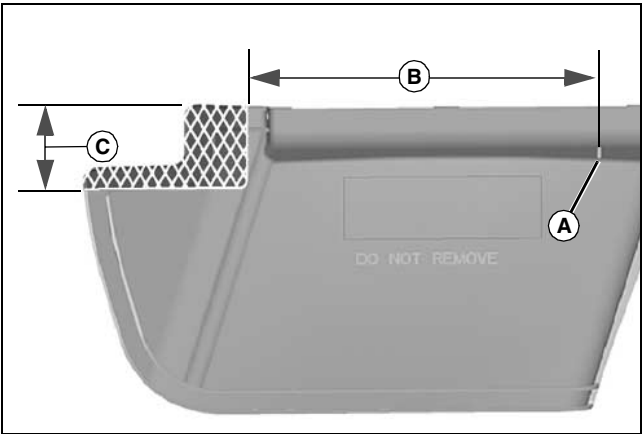
PREPARING VEHICLE



MX25145

3. Insert bushing (C) into lever release (A) and attach to deck mode lever (M) with M6x30 cap screw and nut (D). Tighten hardware.
4. Position pawl plate (J) and shim latch (K) in place and secure with two M6x21 socket head shoulder bolts and nuts (L). Do not overtighten hardware.
5. Install M6x21 socket head shoulder bolt and nut (G). Tighten hardware.
6. Install tension spring (H) from pawl plate (J) to socket head shoulder bolt (G).
7. Install link latch (F) to lever release and pawl plate. Secure link latch with M8.4x1.6 washer and cotter pin (E) and M6.4x1.6 washer and cotter pin (I). Spread cotter pins to secure in place.

Trim Discharge Chute



MX22932

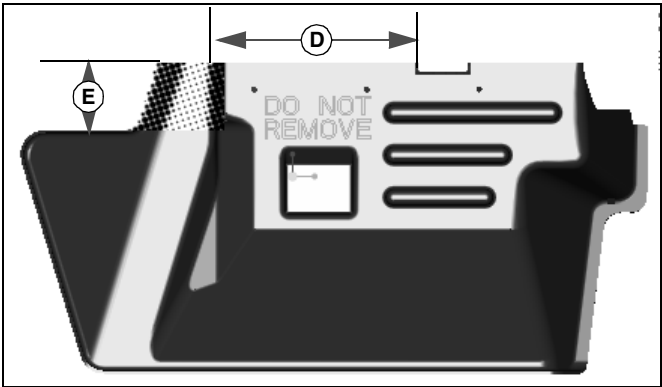
1. Begin at point (A) and measure distance (B) as shown. Scribe a mark.
2. Measure distance (C) beginning from hinge side of guard as shown. Scribe a mark.
3. Extend lines from both marks so they meet at a 90° angle and identify the shaded area as shown.
4. Remove shaded area using a suitable cutting tool.

Specifications

Distance (B) 423.00 ± 0.80 mm (16.65 ± 0.03 in.)

Distance (C) 88.66 ± 0.80 mm (3.50 ± 0.03 in.)

Specifications (For Mulch on Demand Decks)



MX26038

Distance (D) 270.00 ± 0.80 mm (10.62 ± 0.03 in.)

Distance (E) 85.00 ± 0.80 mm (3.34 ± 0.03 in.)

Installing Weight Bracket

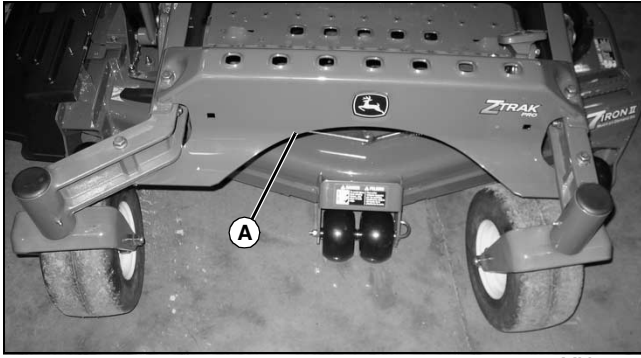
Parts in Kit (Weight Bracket)

Qty.	Description
1	Bracket, Weight
2	Carriage Bolt, M12x35
2	Carriage Bolt, M12x50
4	Locknut, Flange

1. Park machine safely.

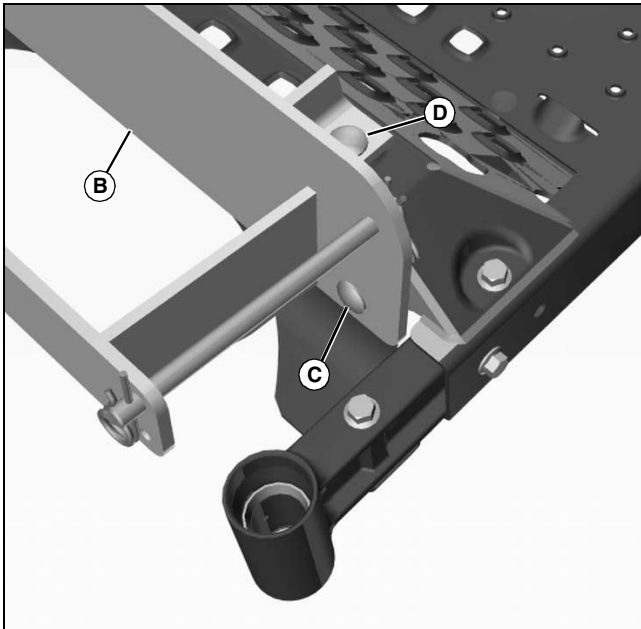
ASSEMBLY

NOTE: Secure and support vehicle as required. Take all safety precautions.



MX25036

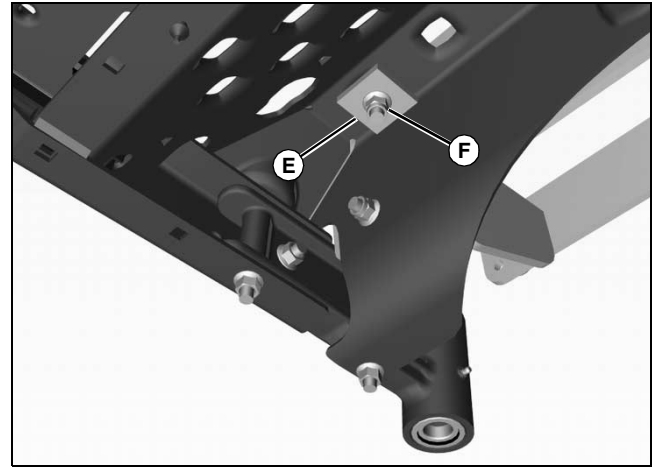
2. Clean front cross member (A) area of any debris.
3. Center weight bracket on cross member.



MX25037

Picture Note: Front caster wheel not shown for photo clarity only.

4. Align front mounting holes of the weight bracket (B) with the holes in the cross member.
5. Install M12x35 carriage bolts (C) and nuts. Tighten all hardware.
6. Install M12x50 carriage bolts (D) through top of weight bracket.



MX25038

7. Install backing plates (E) and nuts (F). Tighten all hardware.

Assembly

Dump From Seat Hopper Parts List

Qty.	Description
1	Assembly, Hopper
2	Link, Door
2	Link, Latch
1	Assembly, Handle
2	Carriage Bolt, M8X30
3	Carriage Bolt, M8X25
5	Nut, M8
2	Washer, M8
1	Plate, Seal
1	Seal
8	Hex Head Bolt, M6X20
8	Locknut, M6
9	Pin, Cotter
8	Washer, M10
2	Hex Head Bolt, M12X110

Blower Assembly Parts List

Qty.	Description
1	Assembly, Blower
1	Assembly, Spring Tension
1	Belt, Primary
1	Bolt, Socket Head, M6x20 (48/54/60/72)

ASSEMBLY

Qty.	Description
1	Boot, Blower
1	Guard, Primary Belt
5	Bolt, Square Neck, M6x20 (48/54/60 MOD)
6	Bolt, Square Neck, M6x20 (60/72)
5	Locknut, M6 (60 MOD)
6	Locknut, M6 (48/54)
7	Locknut, M6 (60/72)

Assemble Blower

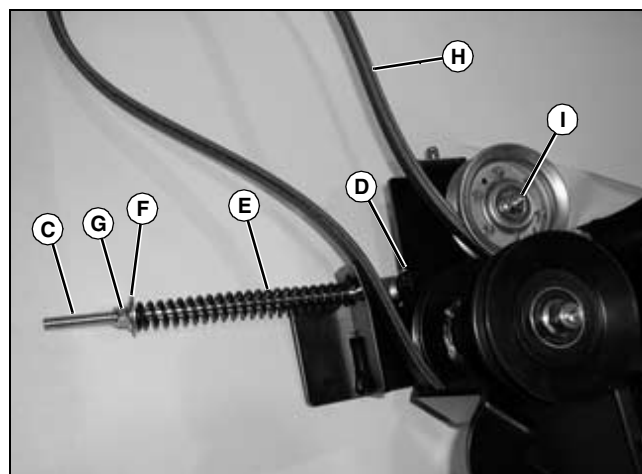


MX22738



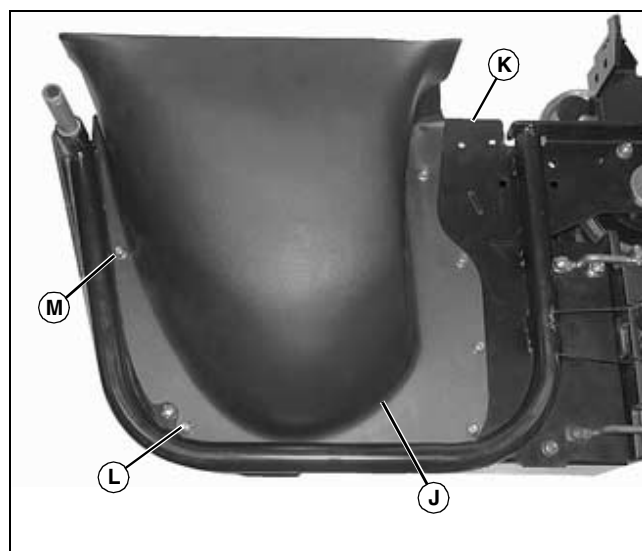
MX22735

1. Remove belt guard (A) and secondary drive belt (B).



MX22776

2. Install primary tension rod (C), retaining clip (D), spring (E), washer (F), and locknut (G).
3. Install primary drive belt (H).
4. Tighten hardware on idler pulley (I).
5. Install secondary drive belt (B) and tighten idler pulley.
6. Adjust secondary drive belt.
7. Install belt guard (A).

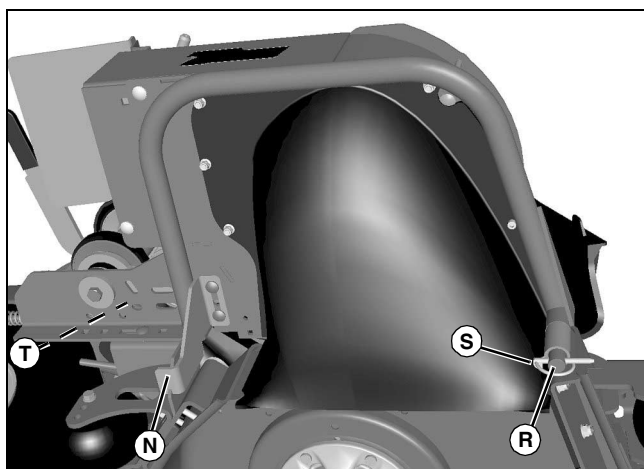


MX22739

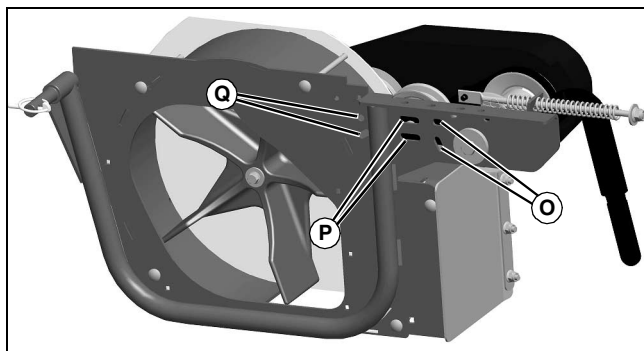
Picture Note: Deck boot for 48/54 in. shown. Socket head cap screw (M) must be installed in this location.

8. Install blower boot (J) on the bottom of blower housing (K) using the appropriate quantity of M6x20 square neck bolts (L) and one M6x20 socket head bolt (M) with M6 locknuts.

ASSEMBLY



MX47237



MX43144

9. Install rear mounting bracket (N) using two M8x25 carriage bolt and locknuts:

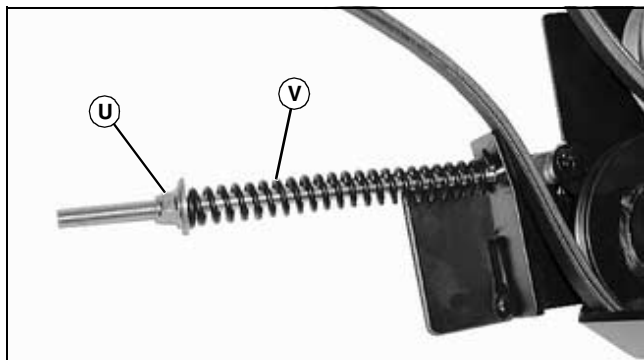
- For 72 in. decks, place bracket into slots (O).
- For 60 in. and all Mulch on Demand decks, place bracket into slots (P).
- For 48 and 54 in. decks place bracket into slots (Q).

10. Install blower front pivot pin (R) and secure with lynch pin (S) in front mounting bracket. Swing blower into position, and align rear mounting bracket to install release handle (T) and M8x25 carriage bolt.

11. Tighten hardware on rear mounting bracket.

12. Connect primary drive belt from blower to drive sheave on deck.

13. Install primary belt guard onto deck.



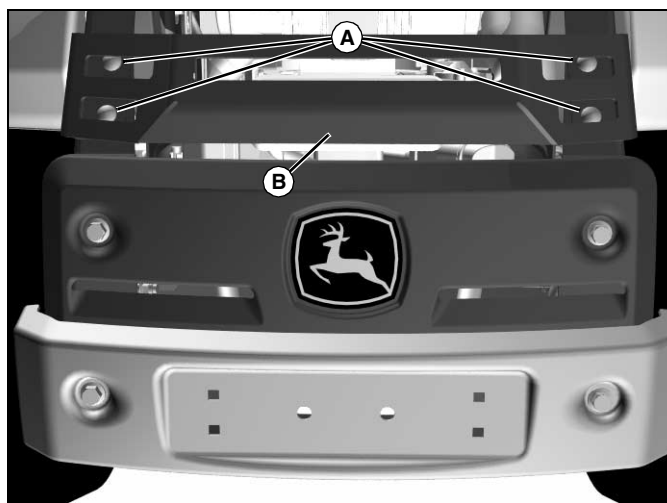
MX22741

14. Adjust primary drive belt.

15. Tighten nut (U) on tension rod until spring (V) length is 150 +/- 10 mm (6.0 +/- 0.4 in.).

Assembling Frame

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



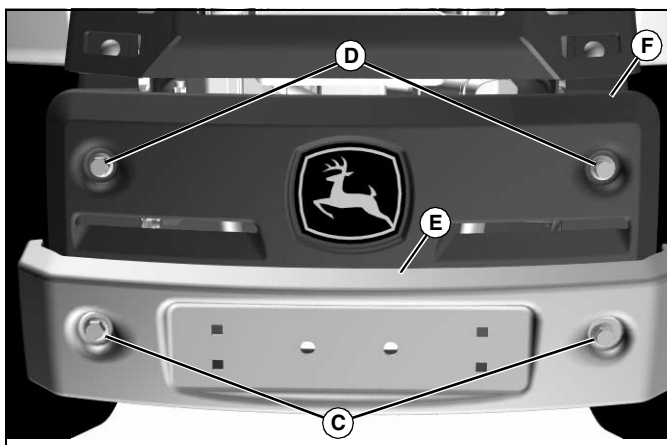
MX25070

2. If model is equipped with an engine guard, remove four carriage bolts, washers, and locknuts (A), and remove engine guard (B).



CAUTION: Avoid injury! Bumper weighs approximately 90 lbs. John Deere recommends that two people be used when removing bumper from machine.

NOTE: If installed, remove rear side weights from mower. They are not compatible with an MCS.

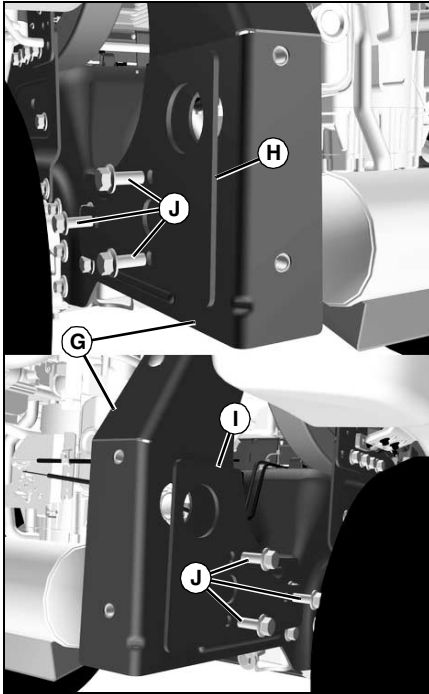


MX25070

3. Remove two M12 nuts (C) and two M12x30 flange head bolts (D). Remove bumper (E) and rear grille (F).

ASSEMBLY

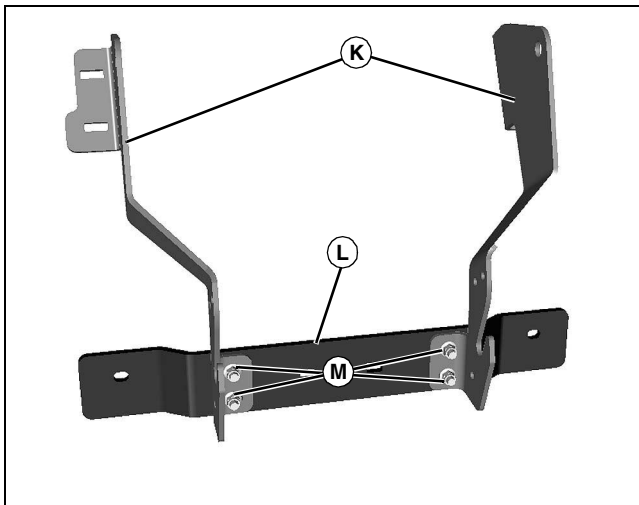
NOTE: Refer to Verify Frame Member Reinforcement in Preparing Vehicle section to determine if the following two steps are necessary.



MX25074

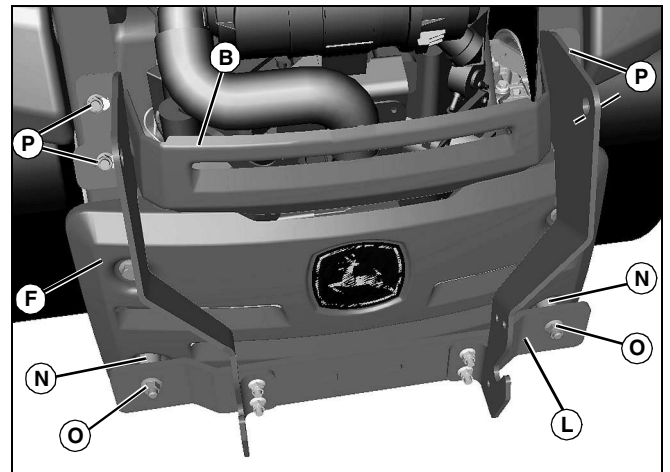
4. Remove three M12x30 flange head bolts on each side holding the rear frame members (G). Remove frame members and replace with reinforced frame members provided. Tighten frame flange head bolts to 115-122 N•m (85-90 lb-ft).

5. Install left plate (H) and right plate (I) with three M12x30 flange head bolts and locknuts (J) on each side.



MX47243

6. Install two side brackets (K) to the steel bumper (L) with four M10 flange head bolts (M) and locknuts. Leave slightly loose until tops of brackets are secure in place.



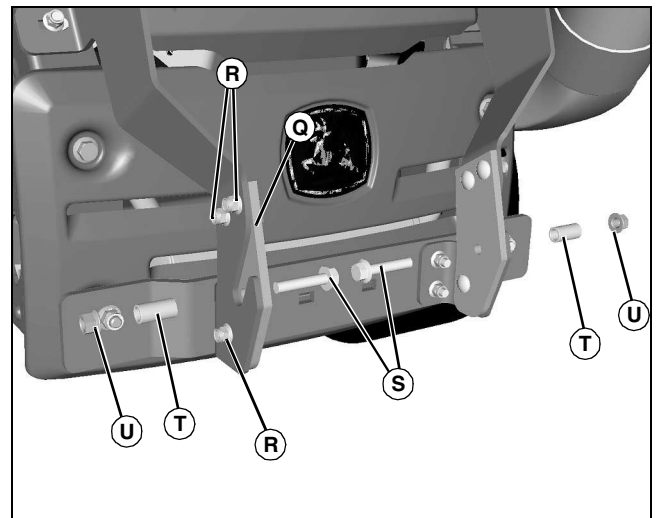
MX47244

7. Install rear grille (F) using existing hardware.

8. Install steel bumper (L) to machine using spacers (N), M12x70 bolts, and M12 locknuts (O). Tighten locknuts to 115 N•m (85 lb-ft).

NOTE: On models with an engine guard (B), be certain to install before securing top of brackets to machine.

9. Secure tops of brackets with four M10x30 flange head bolts, washers, and locknuts (P) in the mounting location for the engine guard. Tighten all bracket hardware.



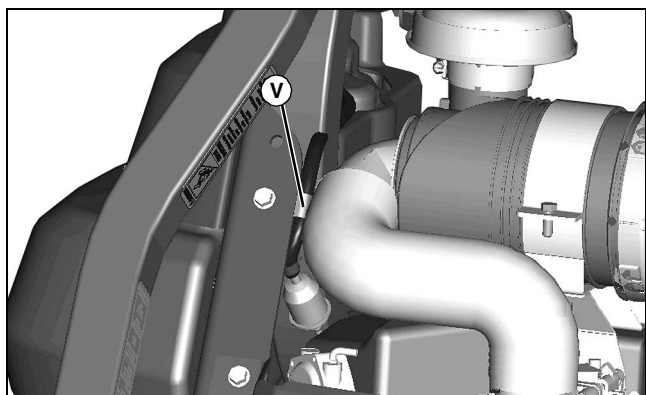
MX47247

10. Install plate (Q) to side brackets (R) using three M10x30 carriage bolts and locknuts (R). Do not tighten hardware at this time. Repeat for other side.

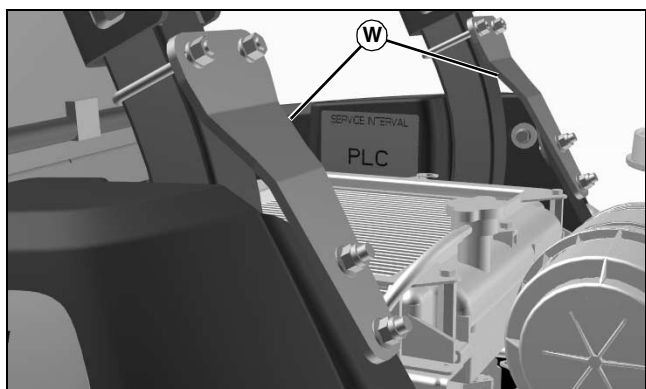
11. Install M12x60 hex head bolt (S), bushing (T) and locknut (U). Tighten all hardware securely.

ASSEMBLY

NOTE: On some models, there is a fuel line clamp (V) located at one of the holes needed for mounting one of the reinforcement plates. Be certain to install fuel line clamp as shown.



MX43619



MX25084

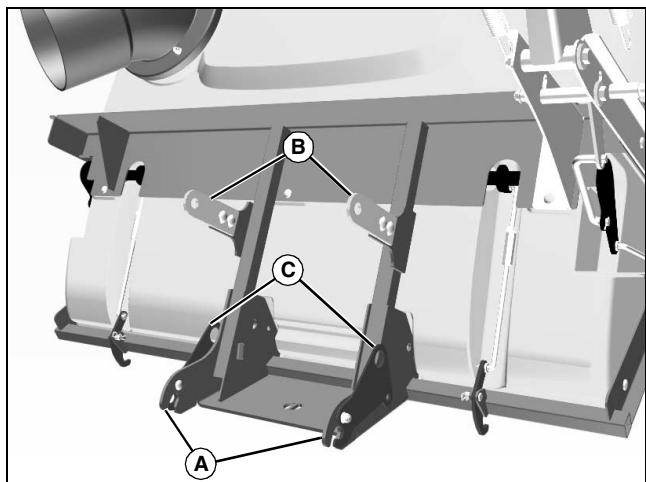
12. Install reinforcement plates (W) with U-bolts and supporting hardware.

13. Tighten all hardware.

Installing Hopper Assembly

IMPORTANT: Avoid damage! Allowing the hopper to contact abrasive surfaces can cause scratching.

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

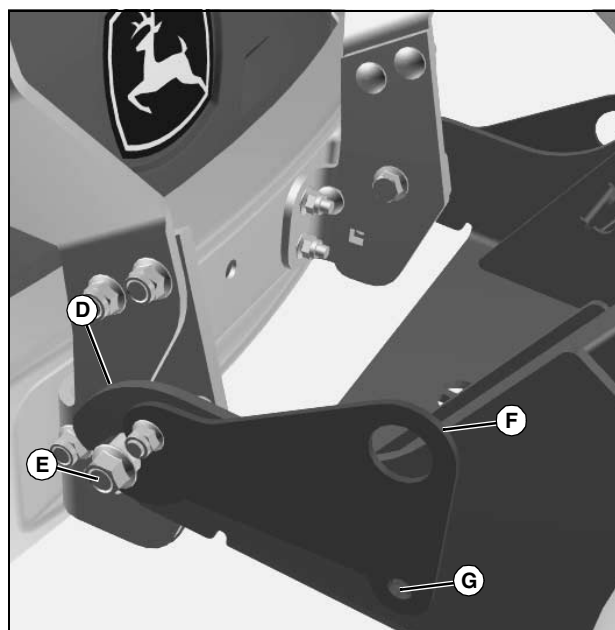


MX24978

2. Position hopper assembly behind the machine. Make sure frame arms (A) are aligned with hopper mounting hardware at rear frame of machine.

3. Install upper latches (B) with four M10x25 carriage bolts and locknuts. Leave hardware loose.

4. Lift open latch levers (C).

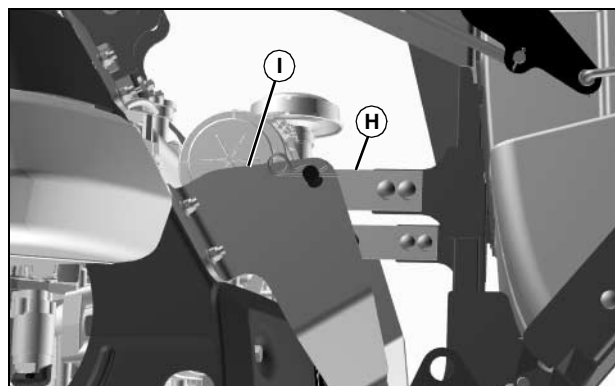


MX24979

5. Place frame arms (D) around hopper mounting pins (E) at rear frame of machine.

6. Push latch levers (F) down engaging detents (G) to secure lower latch.

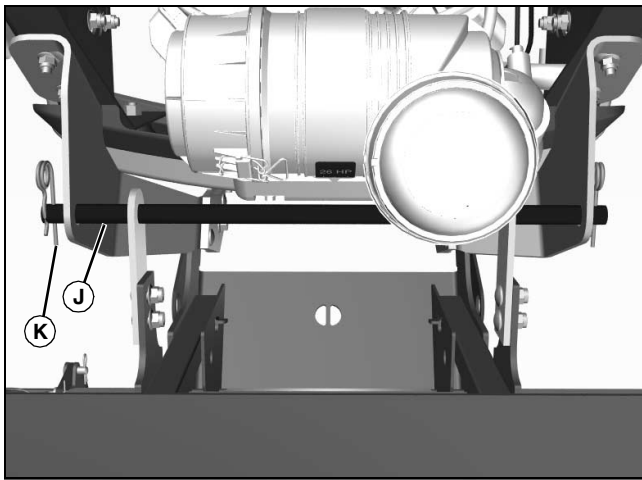
7. Tighten all hardware.



MX24980

8. Pivot entire hopper assembly up toward machine until upper latches (H) align with brackets (I).

ASSEMBLY



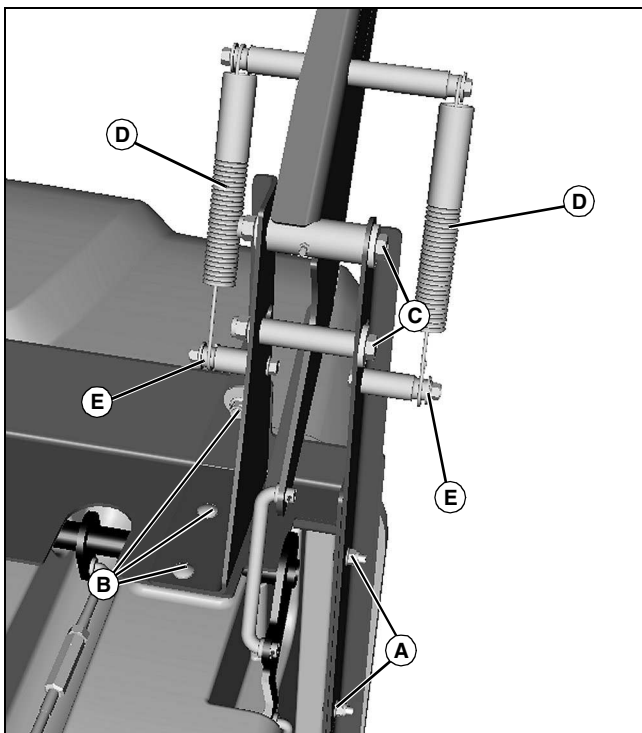
MX26580

9. Install upper support bar (J) and a spring pin clip (K) on both ends of upper support bar.

Assemble Hopper



CAUTION: Avoid injury! Fingers and hands can be pinched or crushed. Be aware of potential pinch points and keep hands away.



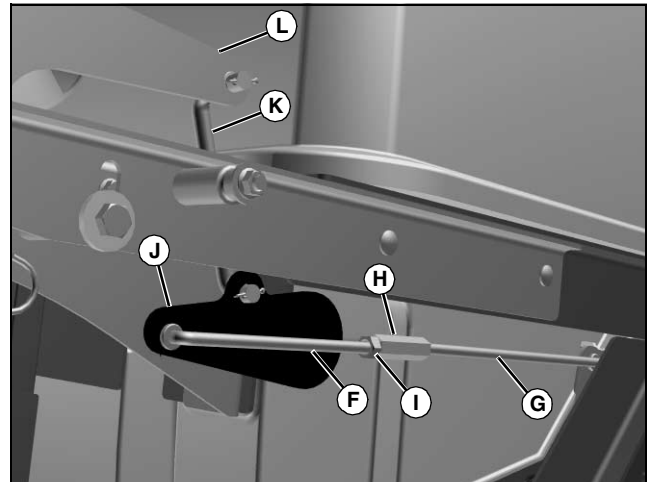
MX47246

1. Remove tie strap from handle assembly.
2. Place handle assembly in position onto hopper frame and install two M8x25 carriage bolts and M8 nuts at location (A). Do not tighten.
3. Install three M8X30 bolts, M8 washers and M8 nuts at location (B). Ensure handle assembly is flat against hopper frame and tighten all hardware.
4. Position handle into assembly and install two M12x110 hex head bolts,

four washers, and two nuts (C).

5. Lift handle and position springs (D) to holders (E).

6. Ensure handle assembly is flat against hopper frame and tighten all hardware.



MX24975

7. Install rods (F and G), turnbuckle (H), and jam nut (I) to left control shaft bellcrank (J) as shown. Secure rods with two M10 washers and cotter pins. Do not bend cotter pins at this time.

8. Install left door handle link (K) to bellcrank (J) and handle (L). Secure link with cotter pin. Do not bend cotter pin at this time.

9. Push door handle down so left door handle link (K) is over center of control shaft bellcrank as shown.

10. Adjust left door link turnbuckle (H) until door will not close any further. Door may have gap at bottom. Do not overtighten.

NOTE: Move door handle between open and closed positions while noting the over center force required to open door. It should take mild force to cause the door rod assembly (F-G) to move over center and open the door.

11. Lock jam nut (I) and disconnect door link from control shaft.

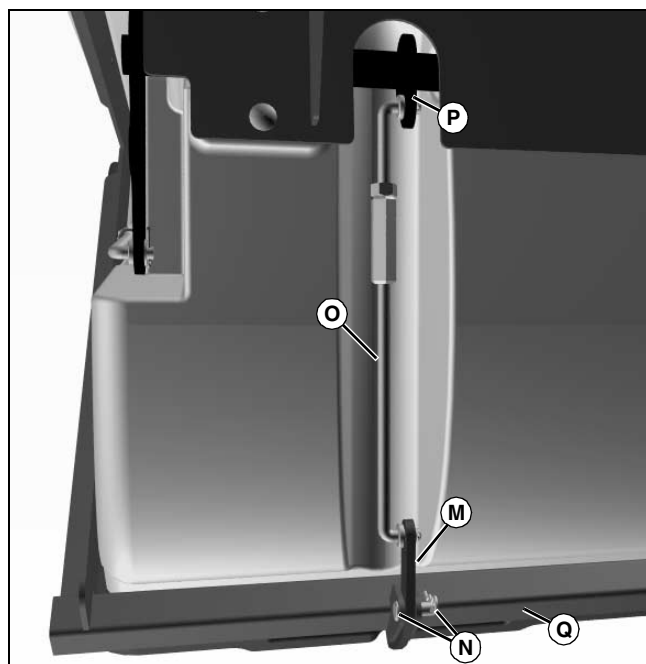
12. Install and adjust right door link assembly as in steps 4-8.

13. Lock jam nut.

14. Connect left door link. Install and bend all cotter pins.

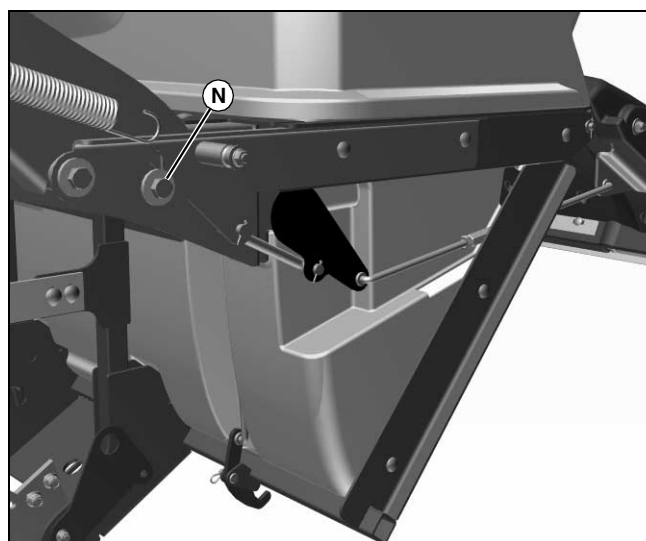
15. Check that the total opening force is not excessive. Adjust if necessary.

ASSEMBLY



MX24976

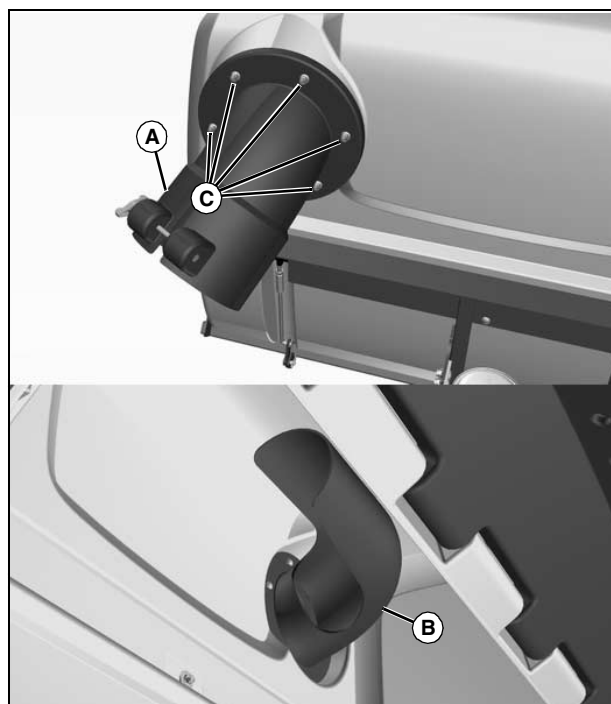
16. With door closed, install door catch (M) to frame with M10x28 clevis pin and spring pin (N).
17. Install latch link assemblies (O) to door catch (M) and bellcrank (P) with M10 washers and cotter pins.
18. Repeat procedure for other door catch assembly.
19. With door handle in closed position, adjust latch hook link turnbuckles so that the door catches rotate up and just touch the door catch bracket (Q). Tighten both jam nuts.



MX24977

20. Loosen and adjust handle stop (N) so door remains open when handle is in fully open position.

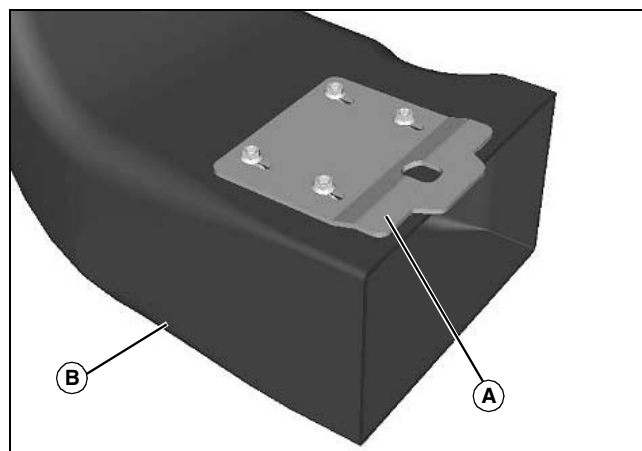
Assemble Upper Chute



MX24981

1. Install the outer (A) and inner (B) upper chute assembly to hopper using five M8x45 carriage bolts and locknuts (C). Tighten all hardware.

Assemble Lower Chute



MX47433

1. Install lower chute connector bracket (A) on bottom of lower chute (B). Secure with M6 carriage bolts and locknuts.

Installing Deck Belt Shield

NOTE: For installation on 48 in. decks only.

INSTALLING

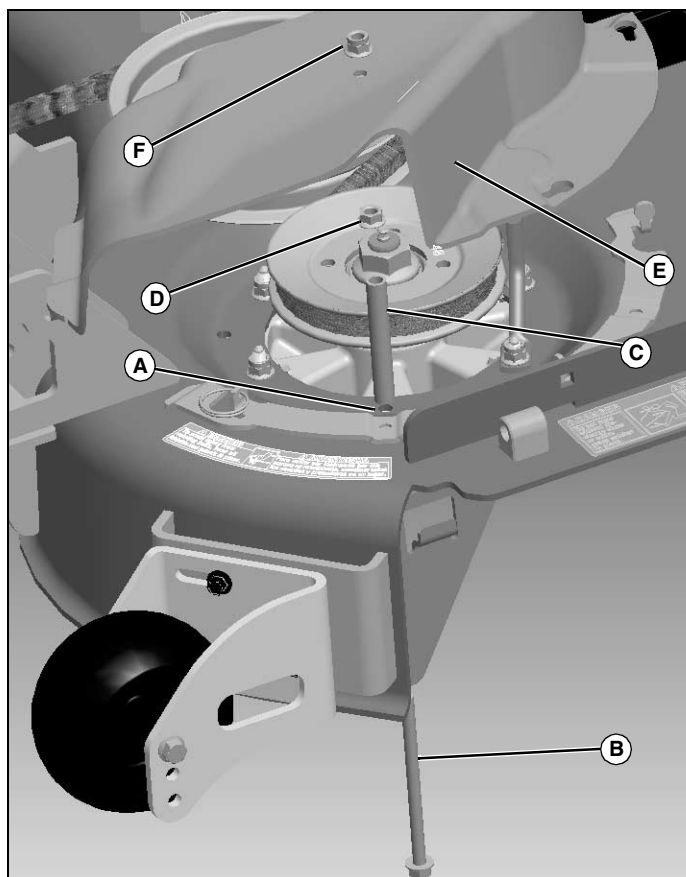
Installing

Install Blower

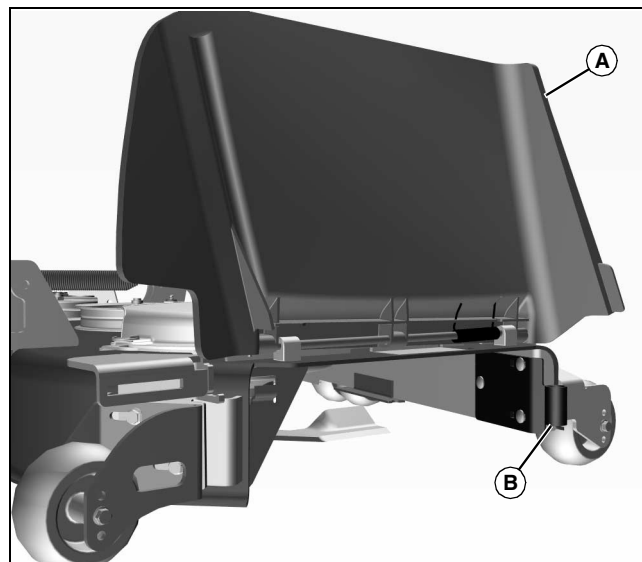


CAUTION: Avoid injury! Machine component or attachment is heavy. Use a safe lifting device or get an assistant to help lift, install or remove component or attachment.

NOTE: The blower assembly weighs approximately 32 kg (70 lb).



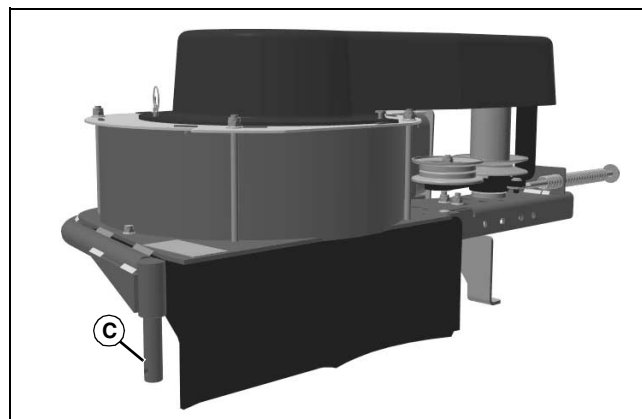
MX26074.tif



MX25129

1. Remove the spindle mounting bolt from location (A). Retain bolt for use if bagger is removed.
2. Insert spindle mounting bolt (B) up through spindle and deck.
3. Install spacer (C) onto spindle mounting bolt.
4. Secure spindle mounting bolt with nut (D).
5. Install belt shield (E) onto spindle mounting bolt and head pins.
6. Secure shield into place with nut (F) onto spindle mounting bolt.

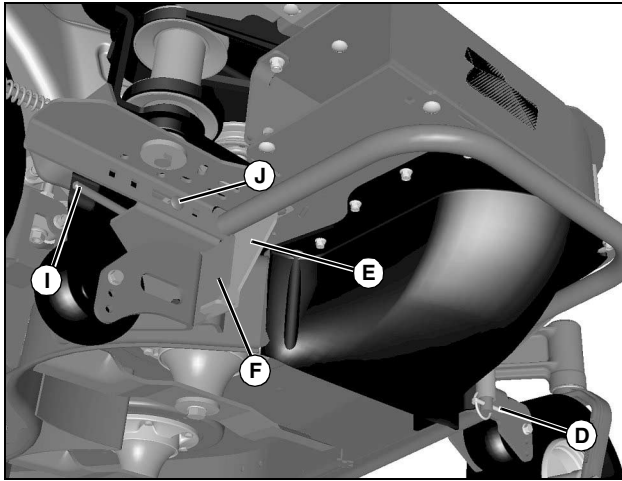
1. Lift discharge chute (A) and locate front mounting bracket (B).



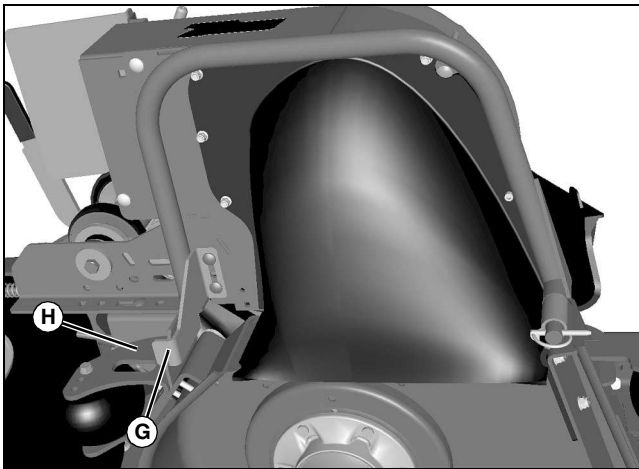
MX25078

2. Insert front pivot pin (C) of blower into front bracket (B).

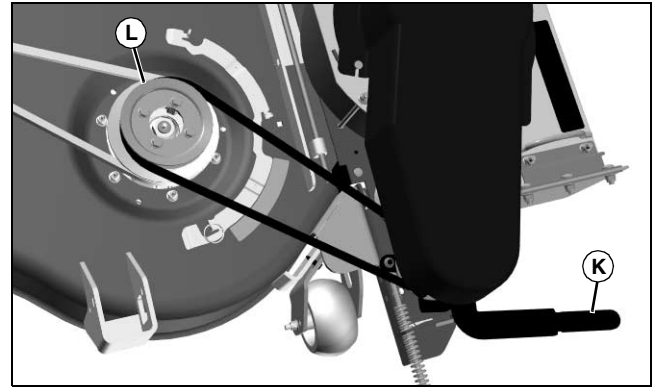
INSTALLING



MX47239



MX47237



MX25069

Picture Note: Parts have been removed for clarity.

7. Use tension lever (K) to allow belt to slip over sheave (L).
8. Install correct blower belt shield for application.

Cutting Hose to Length

1. Cut hose to the length listed below for your mower deck size. Hose may already be correct length for some machine configurations, see chart to verify hose length. Edges of the hose may be sharp after cutting, file to smooth the edges if needed.

Deck Size	DFS MCS
48"	950mm (37-1/2 in.)
48" MOD	950mm (37-1/2 in.)
54"	990mm (39 in.)
54" MOD	990mm (39 in.)
60"	990mm (39 in.)
60" MOD	1030mm (40-1/2")
72"	1100mm (43-3/8")

3. Install front lynch pin (D).

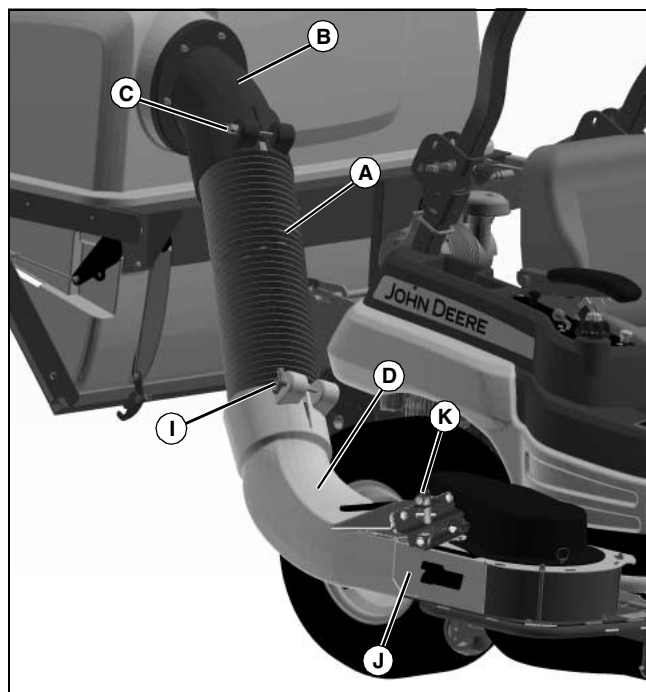
4. Rotate the blower in position so that the bottom blower plate (E) rests on top of the mounting bracket (F) at the rear of the blower. When mounting on 48 inch mower, blower plate does not rest on top of the mounting bracket.

5. Mounting bracket (G) should meet anti-scalp wheel assembly (H) or deck.

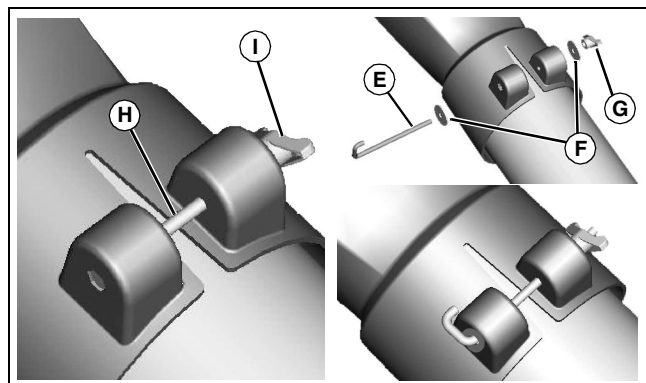
6. Secure in place with the mode change release handle (I) and M8x25 carriage bolt (J).

INSTALLING

Installing Chute



MX47241



MX27539, MX27540

Picture Note: Hex head bolt used in previous production models, J-bolt used in current production models.

1. Connect hose (A) to upper chute assembly (B).
2. Secure hose to upper chute with bolt and knob (C).
3. Connect lower end of hose (A) to lower chute (D).
4. Secure hose to lower chute:
 - Secure hose to lower chute with J-bolt (E), washers (F) and knob (G).
 - Secure hose to lower chute with hex head bolt (H) and knob (I).
5. Lift and hold open exhaust flap on blower.
6. Slide lower chute (D) completely onto blower outlet (J), making certain pin (K) is fully lowered, securing lower chute onto blower.

IMPORTANT: Avoid damage! Do not over tighten knobs. Only tighten to secure hose assembly in place.

7. Tighten knobs on upper and lower chutes to hold hose assembly in place.

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:

- Ballast is not included with this kit but is required for safe operation. Refer to chart for specific requirements and see your authorized John Deere dealer for ordering.
- If installed, remove rear side weights from mower. Side weights are not compatible with the MCS.
- Weight bracket should remain on machine when operating with the MCS even if chart shows that no weights are required.
- Only Z800A with 60 and 72 in. decks: An additional suitcase weight is required on the machine if front pneumatic caster tires are installed in place of the original standard semi-pneumatic tires.

Model	Deck	Required Weights
Z820A	48 in.	5
Z820A	48 in. Mulch on Demand	5
Z820A	54 in. Mulch on Demand	5
Z820A	60 in.	5
Z830A	54 in. Mulch on Demand	5
Z830A	60 in.	5
Z830A	60 in. Mulch on Demand	5
Z830A	72 in.	4
Z840A	54 in.	5
Z840A	60 in.	5
Z850A	60 in. Mulch on Demand	5
Z850A	72 in.	4
Z860A	60 in.	5
Z860A	60 in. Mulch on Demand	5
Z860A	72 in.	4

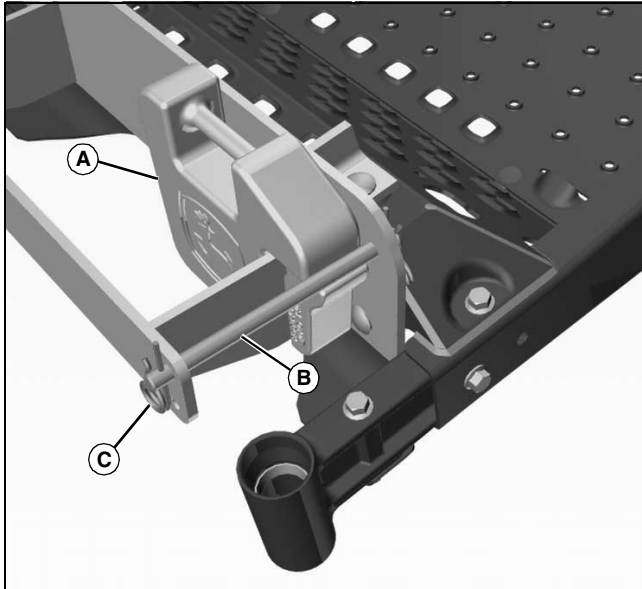
NOTE: If your model is not listed above, look in your power unit manual for information regarding a needed ballast.

Install the proper front ballast to help counterbalance the total weight of the bagger. Remove ballast when the bagger is removed. This will ensure proper operation of the machine when not bagging.

REMOVING AND STORING

Installing Weight

NOTE: See Ballast Chart for the proper weight requirements for your machine.



1. Install suitcase weight(s) (A) onto bracket.

NOTE: If the number of required weights is an odd number, add the odd number weight to the left side of machine (or opposite side of blower) to offset the weight of the blower assembly.

2. Slide the rod (B) over weight(s) to lock down.
3. Install locking pins (C) on rod.

Adjusting Deck Lift Spring Tension

NOTE: Deck lift springs are set at factory specs. When installing the MCS, the springs should be adjusted to the following specifications. When the MCS is removed, the springs should be set back to the original factory settings. Refer to machine operator's manual for the correct factory settings without the MCS installed.

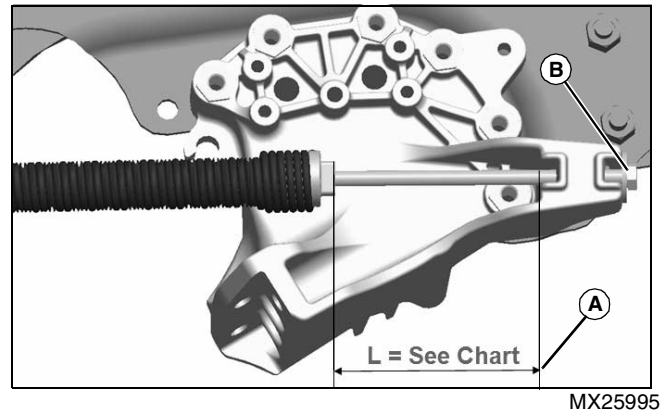
Check Spring Tension

1. Park machine on a hard, level surface.
2. Stop engine and lock park brake.
3. Raise the mower deck to the transport position.

IMPORTANT: Avoid damage! Both deck lift spring assemblies must be adjusted equally.

Do not over-tension the deck lift springs. If the springs are compressed too tightly, the mower deck will float too freely. Decrease deck lift spring tension if operating in rough terrain.

NOTE: If your lift assist does not look like the assembly below, look at your power unit operator's manual for adjustment procedure.



4. Measure spring length (A).

Deck	Recommended Setting with MCS Installed
72 Inch	0 cm (0.0 in.)
60 Inch	5.5 cm (2.1 in.)
54 Inch	6.5 cm (2.5 in.)
48 Inch	0 cm (0.0 in.)
60 Inch Mulch on Demand	2 cm (.75 in.)
54 Inch Mulch on Demand	4.5 cm (1.75 in.)
48 Inch Mulch on Demand	5.5 cm (2.1 in.)

While looking from rear of machine:

- Turn hex nut (B) clockwise to increase deck lift spring tension.
- Turn hex nut (B) counterclockwise to decrease deck lift spring tension.

Removing and Storing

Removing and Emptying Grass Bags

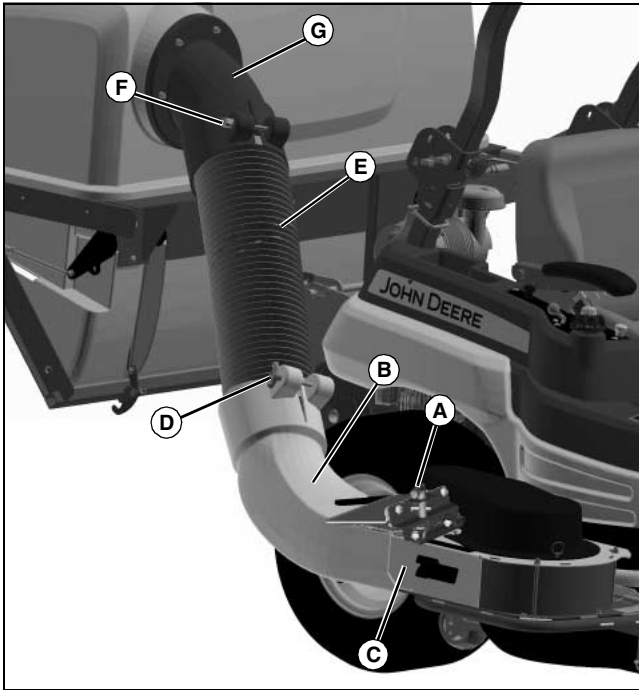


CAUTION: Avoid injury! Contents in grass bags will cause bagger to become heavy and unbalanced. Always remove and empty bags before removing bagger from machine.

1. Park the machine safely. (See Parking Safely in the SAFETY section.)
2. Remove and empty the grass bags.

REMOVING AND STORING

Removing Hopper Chute



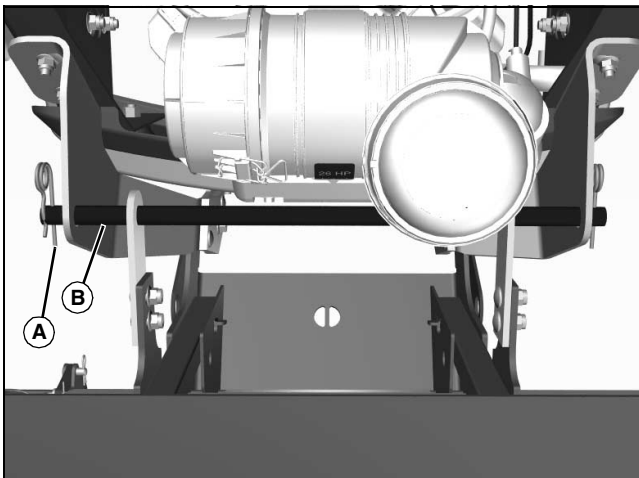
MX47241

1. Pull upward on pin (A), then remove lower chute (B) from blower outlet (C).
2. Remove knob and bolt (D), then remove hose (E) from lower chute (B).
3. Remove knob and bolt (F), then remove hose (E) from upper chute (G).

Removing Hopper Assembly

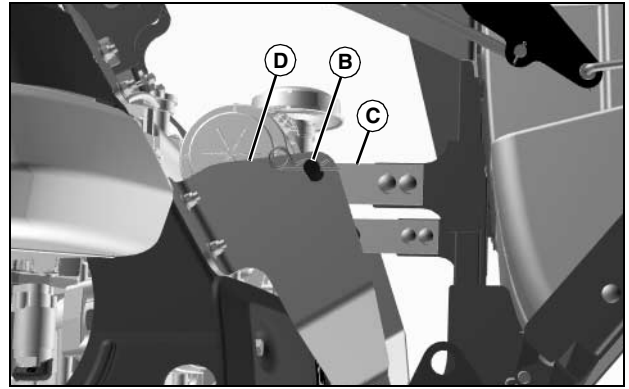
IMPORTANT: Avoid damage! Allowing the hopper to contact abrasive surfaces can cause scratching.

1. Make sure hopper door is latched.
2. Disconnect hose assembly from upper chute.



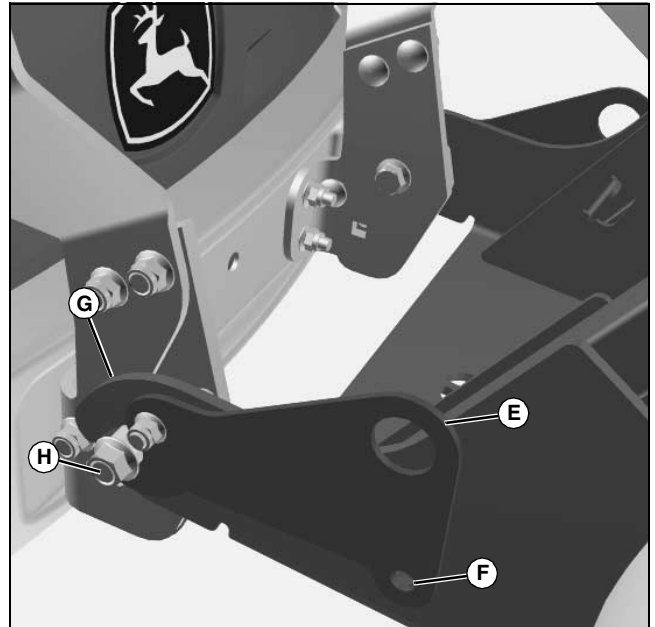
MX26580

3. Remove spring pin clips (A) from both sides of upper support bar (B).
4. Hold hopper assembly securely.



MX24980

5. Remove upper support bar (B) from upper latches (C) and bracket (D).
6. Pivot hopper assembly down to the ground.



MX24979

7. Disengage detents (F) to unlock lower latch and lift latch levers (E) up.
8. Lift assembly to clear frame arms (G) from hopper mounting pins (H) at rear frame of machine.
9. Pull hopper assembly away from machine.



CAUTION: Avoid injury! When the attachment is removed, also remove any ballast that was added to the machine.

Use only attachments and accessories recommended by the manufacturer.

10. Remove ballast.

Removing Blower

1. Remove MCS deck belt shield.

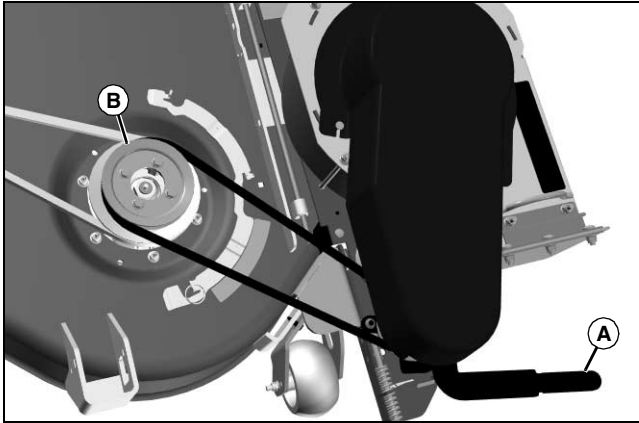
OPERATING



CAUTION: Avoid injury! Machine component or attachment is heavy. Use a safe lifting device or get an assistant to help lift, install or remove component or attachment.

NOTE: The blower assembly weighs approximately 32 kg (70 lb).

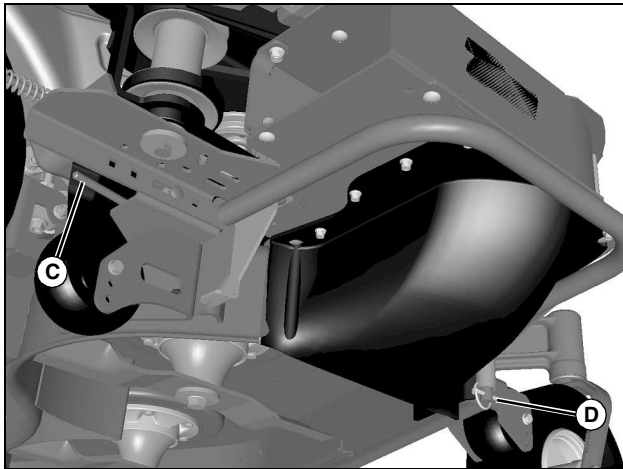
It is not necessary to remove the front mounting bracket from the mower deck when removing the blower.



MX25069

Picture Note: Parts have been removed for clarity.

2. Use tension lever (A) to remove tension on belt. Remove belt from sheave (B).



MX47239

3. Loosen and remove mode change release handle (C) and supporting hardware.

4. Remove front lock pin (D).

NOTE: Discharge chute is spring loaded and will close automatically when blower is removed.

5. Swing rear end of blower out and lift pivot pin from bracket.

6. Install deck belt shield.

7. Adjust deck lift spring tension back to factory setting specification. Refer to the power unit operator's manual for recommended factory settings.

Removing 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.

Remove any added ballast from machine.

Storing Attachment

IMPORTANT: Avoid damage! Store attachment by placing it door side down.

NOTE: Some of the following steps may not apply to your attachment.

1. Remove any grass clippings from MCS or hopper attachment.
2. Remove attachment from machine.
3. Clean attachment and driveline, if equipped, with water pressure from a hose.
4. Remove any shields if needed to clean out all debris.
5. Repair or replace worn, bent, or damaged parts. Tighten loose hardware.
6. Apply paint to painted surfaces where needed to prevent rust.
7. Apply thin coat of grease to blades or tines to prevent rust.
8. Lubricate any pivot points with engine oil to prevent rust.
9. Lubricate any grease points.

IMPORTANT: Avoid damage! Abrasive surfaces can damage attachment. Store attachment on non-abrasive surface or on wooden blocks.

10. If storing attachment outdoors, block up attachment if possible and place a waterproof cover over it.

Operating

Air Flow for Blower

The blower and rear hopper need strong air flow from mower deck to hopper for best performance.

Follow these suggestions to maintain sufficient air flow:

- Keep blower, chutes, hopper top, screen, and underside of mower deck clean.
- Keep throttle lever at FAST position but travel slow.
- Level mower front-to-rear so rear of mower is no more than 10 mm (3/8 in.) higher than front of mower.
- Operate mower in higher cutting positions.
- Replace worn or damaged mower blades.

Using the Blower

NOTE: If blower is not picking up grass clippings adequately, reduce

SERVICE INTERVALS

machine ground speed. Generally, ground speed should be slower when using the MCS or hopper.

Starting Blower

Whenever the PTO is engaged to start the mower deck, the blower will automatically start.

Stopping Blower

Whenever the machine PTO is disengaged to stop the mower deck, the blower will automatically stop.

Unplugging Mower, Hopper, or Material Collection System



CAUTION: Avoid injury! Do not attempt to unplug attachment with machine running.

- Rotating blades are dangerous. Shut off the engine and remove the key before getting off the seat to inspect the machine and attachment.
- Thrown objects can cause serious injury. Make sure all machine parts are stopped before raising hopper top or removing chutes.

Checking for Plugging While Driving

Check the flow indicator on MCS chute (if equipped) periodically for any indication of loss of air flow.

If grass builds up in front of mower discharge chute, check for plugged chute or problems with blower assembly (if equipped).

If there is a trail of clippings behind mower or if clippings blow to the side, check for plugged chute, full hopper, or problems with blower assembly.

Removing Debris From Inspection Points



CAUTION: Avoid injury! Do not use hands or feet to clear plugged mower deck or blower assembly. Stored energy can cause blades to rotate.

1. Park machine safely. Wait for all moving parts to stop before getting off to inspect machine.
2. Open hopper cover. Check chute outlet.
3. Remove chute from mower deck or blower assembly. Check chute inlet.
4. Check under mower deck for debris.

Using the Dump From Seat Hopper

1. When hopper is full, disengage PTO.



CAUTION: Avoid injury! Visibility is restricted when backing up machine with MCS installed.

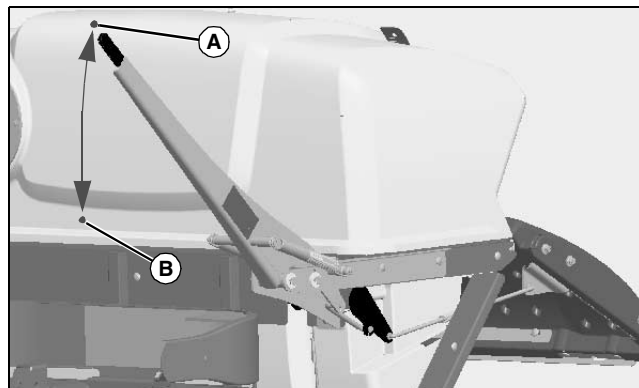
- Keep bystanders away from machine, especially when backing up.
- Look behind and around MCS before backing up machine.
- Stop machine on level ground when emptying MCS.
- Keep vehicle a safe distance away from edge of drop-offs when unloading MCS.

2. Drive machine to a safe dump location.
3. Move motion control levers to the neutral lock position.

4. Lock park brake.



CAUTION: Avoid injury! Fingers and hands can be pinched or crushed. Be aware of potential pinch points and keep hands away.



MX23144

Picture Note: Keep hands away from door handle linkage.

5. Lift door handle to fully open position (A).
6. Unlock park brake.
7. Move motion control levers to the neutral position.
8. Drive forward until hopper door is clear of pile of grass clippings.
9. Close hopper door by lowering door handle to fully closed position (B)

Transporting

If the blower and hopper will be left on the machine during transport, follow these guidelines when transporting the unit:

- Empty the hopper. Full hopper adds extra weight, which can overstress the hopper frame on rough roads.
- Make sure the hopper door is latched securely.

Service Intervals

Service Intervals

Daily - As Needed

- Clean hopper exhaust screen.
- Clean hose adapter and hose.

Every 50 Hours

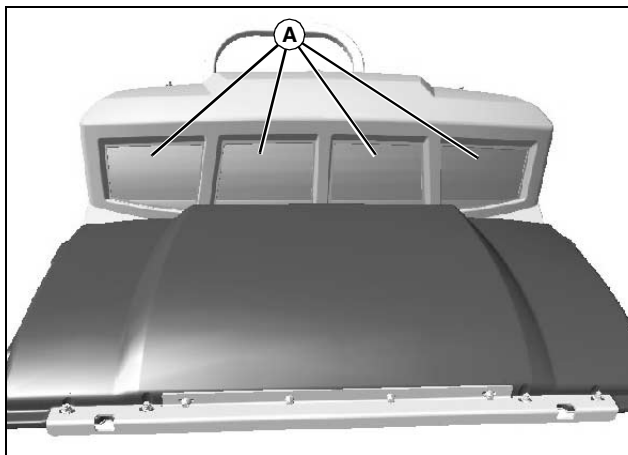
- Check belt tensions.
- Check idler and jacksheave bearings.
- Inspect housing for wear.
- Grease handle pivot bushing.
- Grease control shaft bushings.
- Check hose for wear and deterioration. Replace if necessary.

SERVICE

Service

Cleaning Hopper Exhaust Screen

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Open hopper.



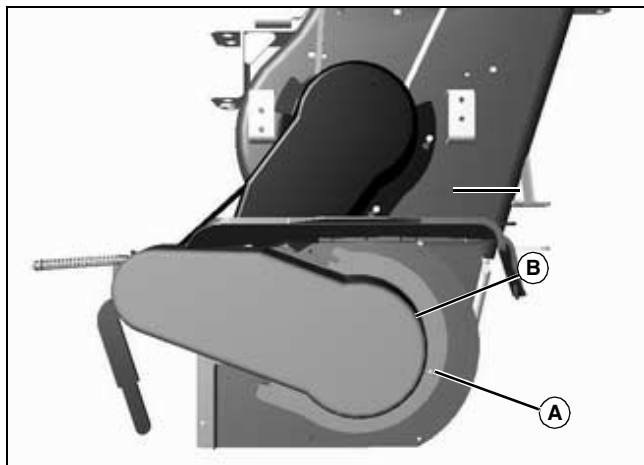
MX22929

3. Clean the four exhaust screens (A) with a brush or water from the outside of hopper. Screens are located on the inside of the hopper.
4. Close hopper and secure latch.

Removing Drive Belts

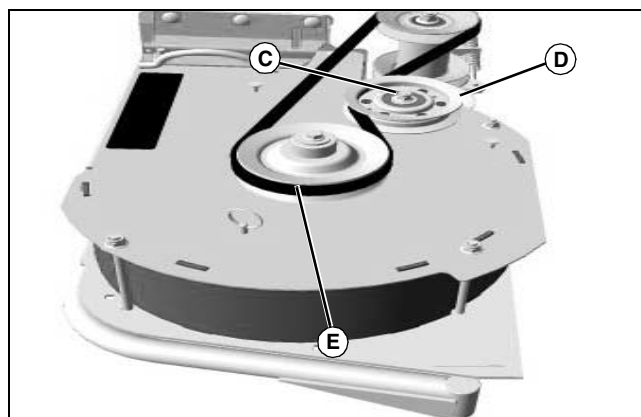


CAUTION: Avoid injury! Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.



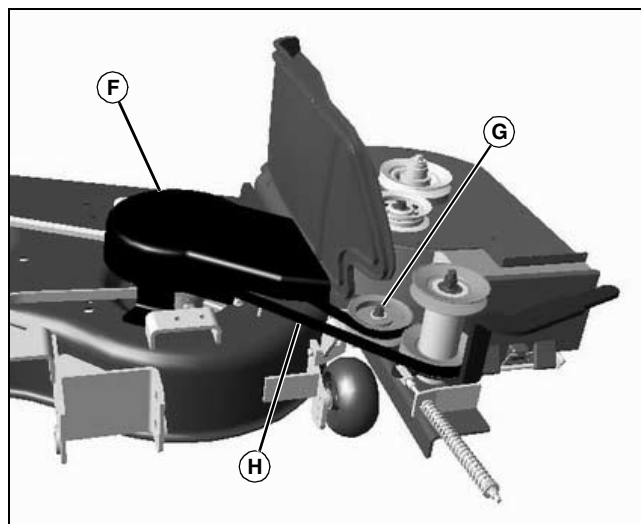
MX22814

1. Remove lock ring (A) and then the secondary belt shield (B).



MX22735

2. Loosen nut (C), slide pulley (D) aside and remove secondary drive belt (E).



MX22817

Picture Note: Parts have been removed for a clear illustration.

3. Remove primary belt shield (F).
4. Loosen nut (G) on tension pulley but do not remove.

NOTE: The use of the tension lever will be required to assist the removal of the belt.

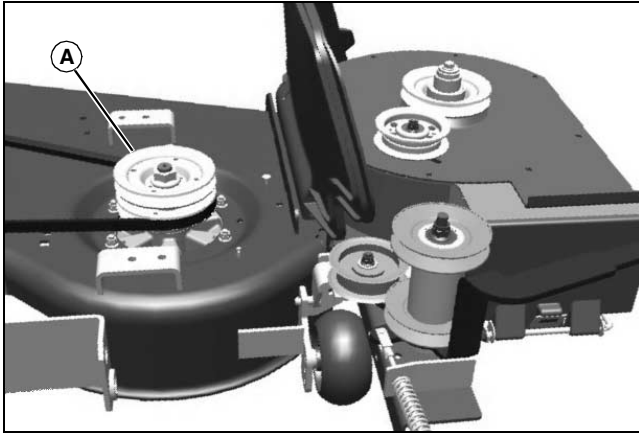
5. Remove primary belt (H).
6. Remove all grass accumulation around belt, idler and sheaves.

SERVICE

Installing Drive Belts



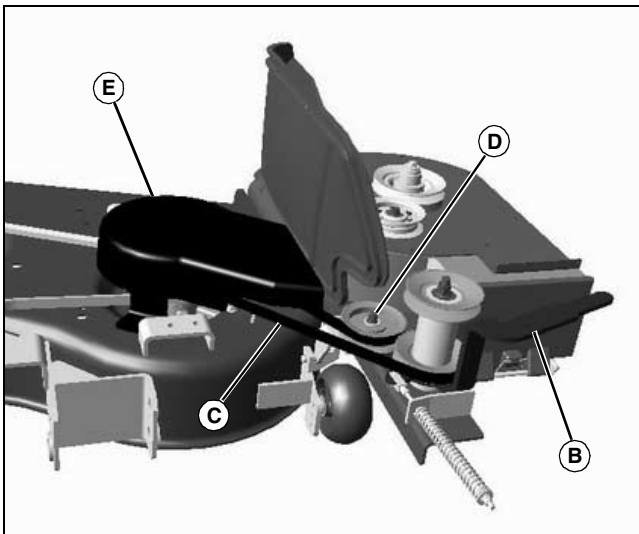
CAUTION: Avoid injury! Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.



MX22819

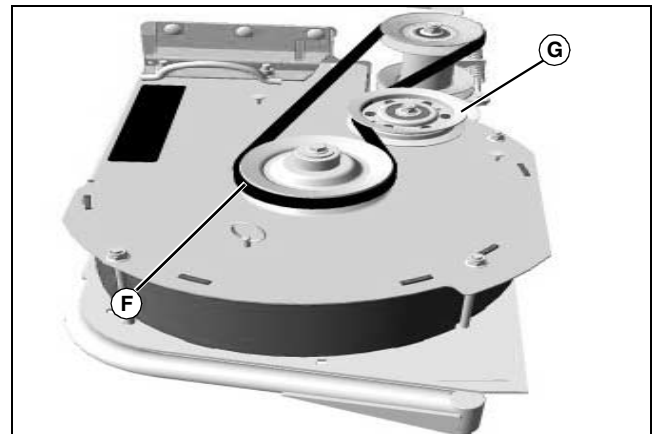
Picture Note: Parts have been removed for a clear illustration.

1. Install sheave (A).



MX22817

2. Using the tension lever (B), install the primary drive belt (C) and tighten nut on tension pulley (D). Check and adjust belt tension. (See Adjusting Primary Belt Tension in SERVICE section.)
3. Install primary belt shield (E).



MX22735

4. Install secondary belt (F) and adjust belt tensioner (G). (See Adjust Secondary Belt Tension in SERVICE section.)



MX22731

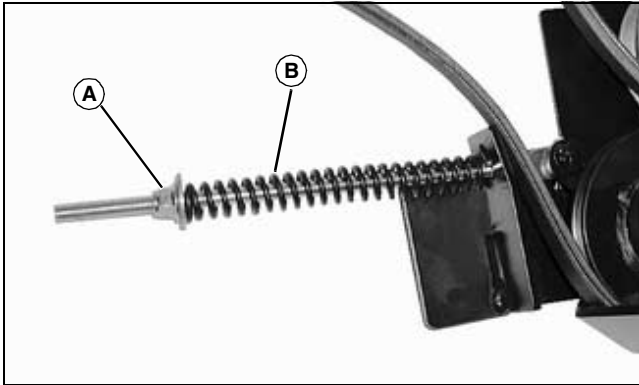
5. Install secondary belt shield (H).

SERVICE

Adjust Primary Belt Tension

CAUTION: Avoid injury! Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.

IMPORTANT: Avoid damage! Check tension of new belts after first five hours of operation, adjust if needed.

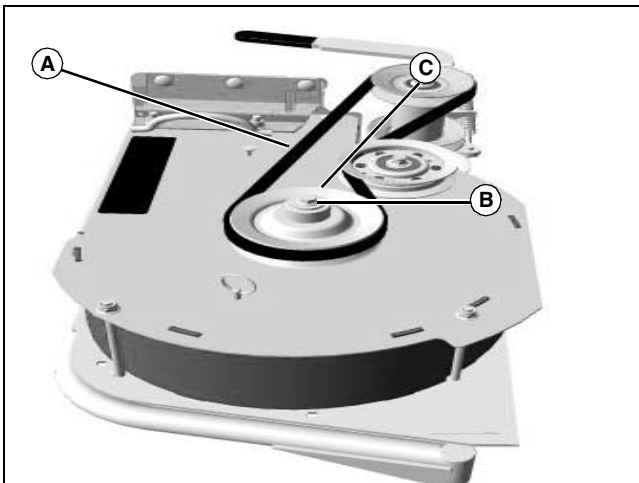


1. With belt installed tighten nut (A) on tension rod until spring (B) length is 150 mm +/- 10 mm (5.905 in. +/- 0.394 in.).

Adjust Secondary Belt Tension

CAUTION: Avoid injury! Rotating parts can catch fingers, loose clothing, or long hair. Wait for engine and all moving parts to stop before leaving operator's station to adjust or service machine.

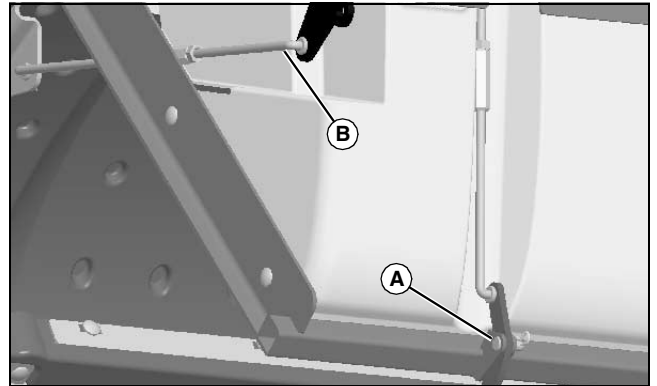
IMPORTANT: Avoid damage! Check tension of new belts after first five hours of operation, adjust if needed.



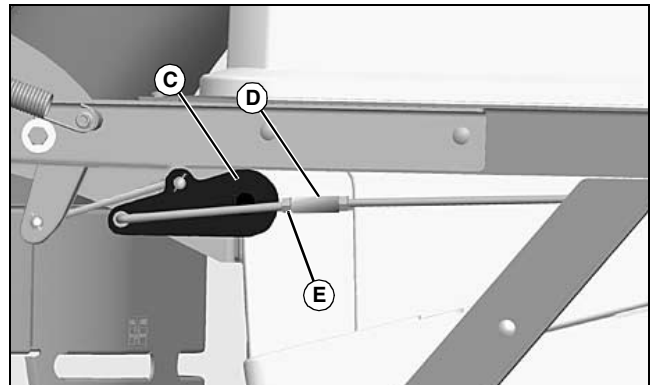
Picture Note: Belt guard not shown.

1. Remove secondary belt guard.
2. Press on belt at mid point of belt span (A). There should be 1/4 in. deflection with 3 lb of force.
3. Loosen cap screw (B) on belt tensioner (C). Adjust belt accordingly.

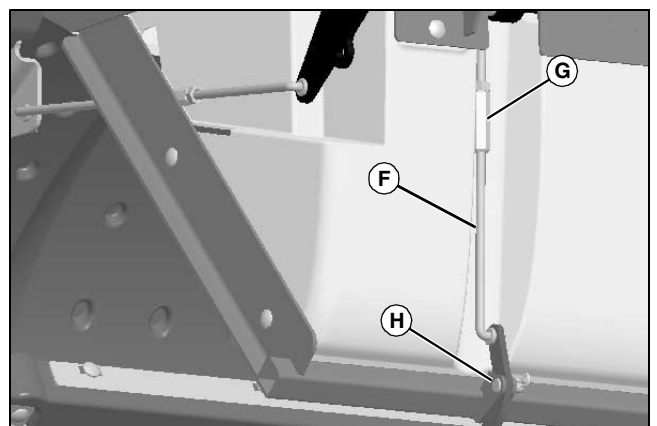
Adjusting Dump from Seat Hopper Linkage



1. Disconnect both latch hook and rod assemblies from hopper frame by removing pivot pin (A). Allow latch hooks to hang from control shaft. Disconnect, but do not remove, right door link (B) from control shaft.



2. Fully close door by placing handle in down position and linkage over center of bellcrank (C).
3. Adjust left door link turnbuckle (D) until door will not close any further.
4. Actuate door by pushing down on the control shaft bellcrank by hand to check that force required to go over center is not too high. Lock jam nut (E).
5. Remove left door link from control shaft. Install right door link.
6. Adjust right door link as in steps 2 - 4.
7. Install left door link. Tighten jam nuts.



8. With door closed, install both latch hook and rod assemblies (F) to

TROUBLESHOOTING

frame. Adjust link turnbuckles (G) as necessary to get pivots to line up so that pivot pin (H) may be inserted. Install cotter keys.

9. Adjust latch hook link turnbuckles so that the hooks rotate up and just touch the door catch bracket. Tighten both jam nuts.

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
Not All Grass Is Picked Up	Grass too wet. Throttle speed too slow. Travel speed too fast. Hopper is full. Hopper exhaust screen is dirty. Plugged chute or blower. Plugged or dirty mower deck. Incorrect or dull mower blades. Mower deck not leveled properly. Mower cutting height too low. Belt slipping.
Grass Clippings Trail Behind or Blow to the Side of Mower	Plugged chute. Problem with the blower. Hopper is full. Belt slipping.
Blower or Chute Plugs	Grass too wet. Throttle speed too slow. Travel speed too fast. Hopper is full. Hopper exhaust screen is dirty. Mower deck not leveled properly. Mower cutting height too low. Plugged or dirty mower deck. Belt slipping.
Grass Leaks from Hopper	Hopper door not latched. Hopper seal damaged or missing. Door requires adjustment.

Specifications

14 Bushel Dump From Seat Hopper

Front Ballast Recommendation (See Installing Ballast)

Total Capacity 500L (14 bushel)

Weight (Hopper Empty) 113 kg (250 lb)

Specifications and design are subject to change without notice.

Getting Quality Service

Service Literature

If you would like a copy of the Parts Catalog or Technical Manual for this machine call:

- **U.S. & Canada:** 1-800-522-7448.
- **All Other Regions:** Your John Deere dealer.

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 the serial number or product identification number (PIN) for your machine or attachment. These are the numbers that you recorded in the Product Identification section of this manual.

Order Service Parts Online

Visit <http://JDParts.deere.com> for your Internet connection to parts ordering and information.

John Deere Quality Continues with Quality Service

John Deere provides a process to handle your questions or problems, should they arise, to ensure that product quality continues with your John Deere dealer's parts and service support.

Follow the steps below to get answers to any questions you may have about your product.

1. Refer to the appropriate attachment, machine or equipment operator manuals.
2. Contact your John Deere dealer with unanswered questions.
3. In North America or Canada, call the John Deere Customer Contact Center.
 - Call 1-800-537-8233 and provide product serial number and model number.

GETTING QUALITY SERVICE
