

**JOHN DEERE**  
**AG & TURF DIVISION**

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**Material Collection System (MCS)**  
**600 Liter High Dump**

OMTCU31163 J1

**OPERATOR'S MANUAL**



**JOHN DEERE**

**Original Instruction**

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

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# 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.

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## Product Identification

### Product Compatibility

The 600 Liter High Dump Material Collection System is compatible with the 1420, 1435, 1445 4WD models and the 1565 Front Mower.

### Record Identification Numbers

600 Liter High Dump Material Collection System

Serial No. (150001 -)

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 model and serial number for the attachment and record the information in the spaces provided below.

DATE OF PURCHASE:

\_\_\_\_\_

DEALER NAME:

\_\_\_\_\_

DEALER PHONE:

\_\_\_\_\_

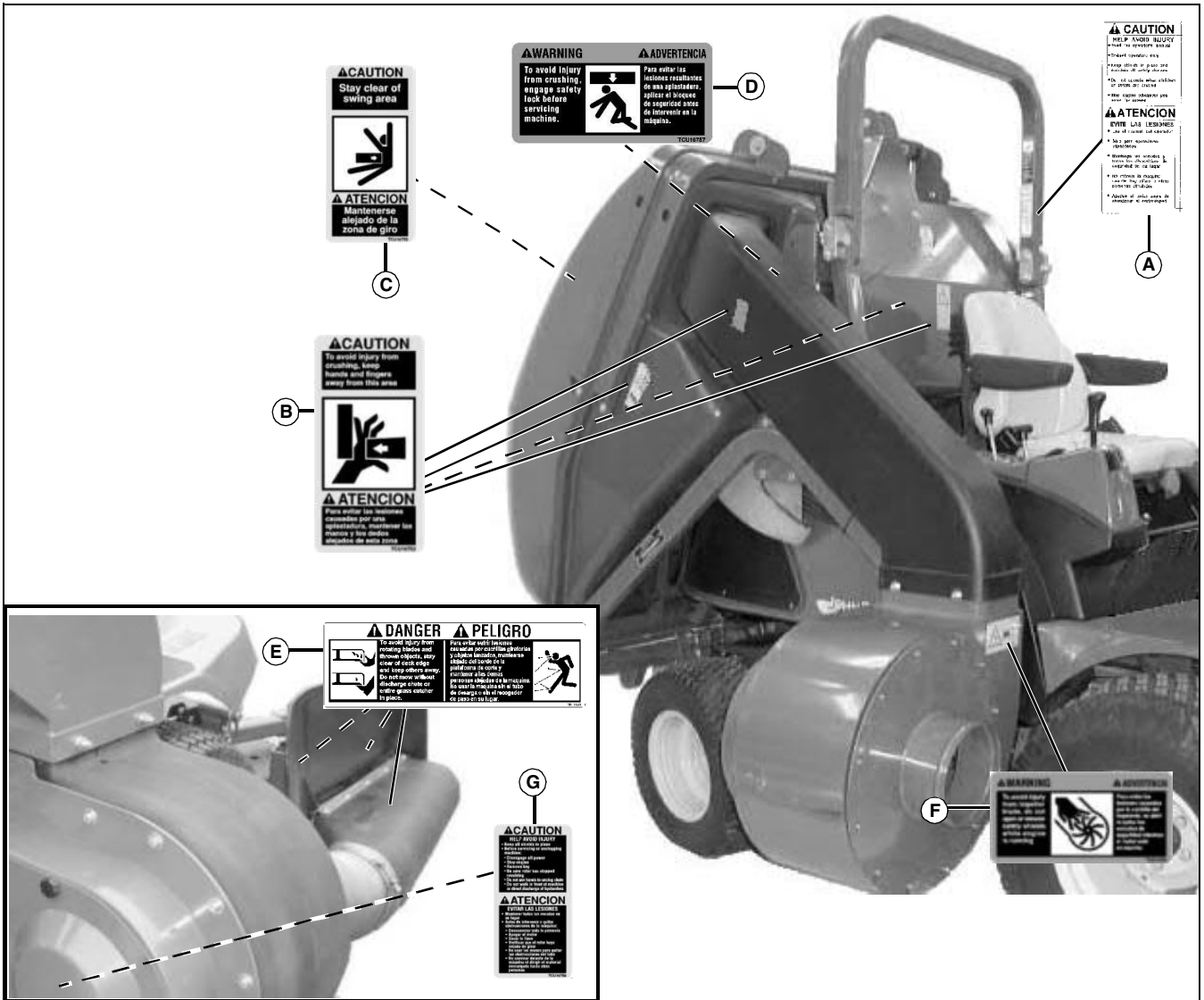
PRODUCT SERIAL NUMBER (A):

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# Safety Labels

## Safety Labels

### Safety Label Location



MX13191, MX15607

- A- MT7235 - Warning - Operator's Manual
- B- TCU16753 - Avoid Injury from Crushing
- C- TCU16755 - Avoid Injury from Crushing
- D- TCU16757 - Avoid Injury from Crushing
- E- M131748 - Avoid Injury from Rotating Blades and Thrown Objects
- F- TCU16754 - Avoid Injury from Rotating Blades
- G- TCU16756- Take Proper Safety Precautions



### 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.

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

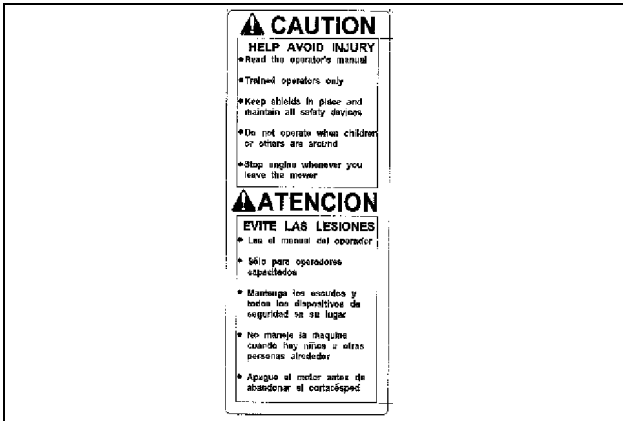
Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**

# Safety Labels

## CAUTION - MT7235



MT7235

- Read the operator's manual.
- Trained operators only.
- Keep shields in place and maintain all safety devices.
- Do not operate when children or others are around.
- Stop engine whenever you leave the mower.

## CAUTION - TCU16753



TCU16753

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

## CAUTION - HELP AVOID INJURY - TCU16756



TCU16756

- Keep all shields in place.
- Before servicing or unlogging machine:
  - Disengage all power.
  - Stop engine.
  - Remove key.
  - Be sure rotor has stopped revolving.
  - Do not use hands to unclog chute.
  - Do not walk in front of machine or direct discharge at bystanders.

## WARNING - TCU16757



TCU16757

- To avoid injury from crushing, engage safety lock before servicing machine.

# Safety

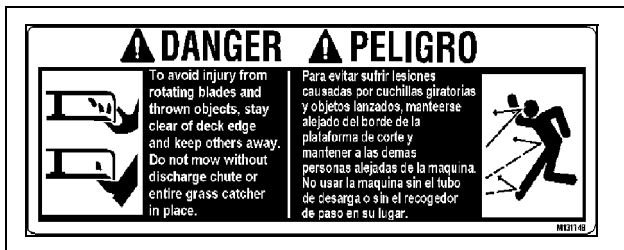
## CAUTION - TCU16755



TCU16755

- Stay clear of swing area.

## DANGER - M131748



M131748

To avoid injury from rotating blades and thrown objects, stay clear of deck edge and keep others away.

Do not mow without discharge chute or entire grass catcher in place.

## 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.
- 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

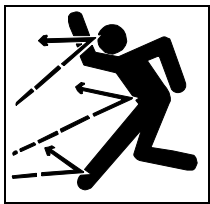
1. Stop machine on a level surface, not on a slope.
2. Disengage mower blades or any other attachments.
3. Lower attachments to the ground.
4. Lock the park brake.
5. Stop the engine.
6. Remove the key.
7. Wait for engine and all moving parts to stop before you leave the operator's seat.
8. Close fuel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

# Safety

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.

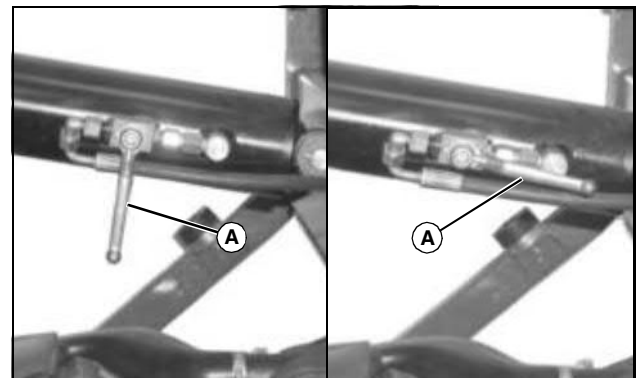
## Using the Lift Cylinder Safety Lock

To safely service the machine with the MCS in the raised position, always use the lift cylinder safety lock.



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

- Support any raised attachment with a mechanical lock or other safe method before servicing.
- Empty all material from any attachment before servicing.



MX13198

• To lock the hydraulic lift in the raised position, turn handle (A) to the left as shown.

• To unlock the hydraulic lift, turn handle (A) to the right as shown.



## Avoid High Pressure Fluids

• Hydraulic hoses and lines can fail due to physical damage, kinks, age, and exposure. Check hoses and lines regularly. Replace damaged hoses and lines.

- Hydraulic fluid connections can loosen due to physical damage and vibration. Check connections regularly. Tighten loose connections.
- Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A. Information may be obtained in the United States and Canada only by calling 1-800-822-

# Assembly

8262.

## Assembly

### Identify Parts

| Qty. | Description         |
|------|---------------------|
| 1    | Driveline           |
| 1    | Wire Harness        |
| 2    | ROPS Bracket        |
| 2    | Rear Bracket        |
| 1    | Belt (1650mm)       |
| 1    | 2 Belt Set (1350mm) |
| 1    | Pulley              |
| 1    | Bag of Parts        |

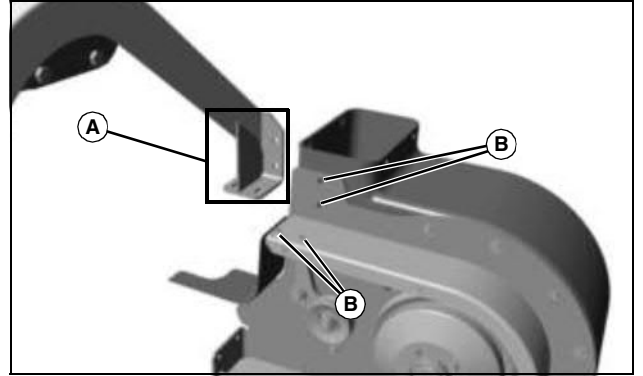
### Bag of Parts

| Qty. | Description                    |
|------|--------------------------------|
| 2    | Bolt, M20 x 130 (late models)  |
| 2    | Bolt, M20 x 100 (early models) |
| 2    | Bolt, M16 x 40                 |
| 4    | Bolt, M12 x 35                 |
| 2    | Bolt, M10 x 35                 |
| 2    | Bolt, M10 x 25                 |
| 2    | Locknut, M20 (early models)    |
| 2    | Locknut, M16                   |
| 4    | Locknut, M12                   |
| 4    | Locknut, M10                   |
| 2    | Lockwasher, M20 (late models)  |
| 2    | Washer, M16                    |
| 2    | Spacer                         |

### Install Blower Housing

1. Install support stands on MCS frame.

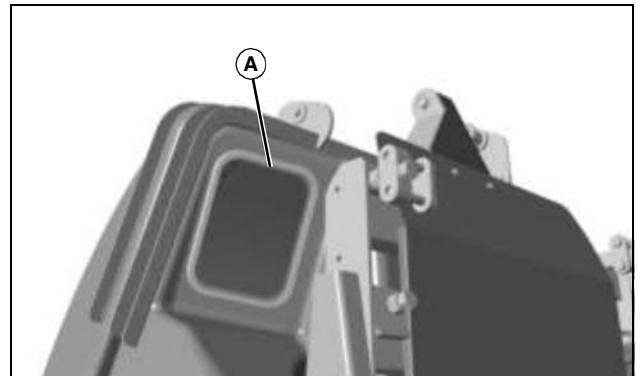
**CAUTION: Avoid injury! The blower housing is heavy. Before installing or removing blower housing, install the optional support stand or use a safe lifting device to support the blower housing and prevent it from falling.**



MX15626

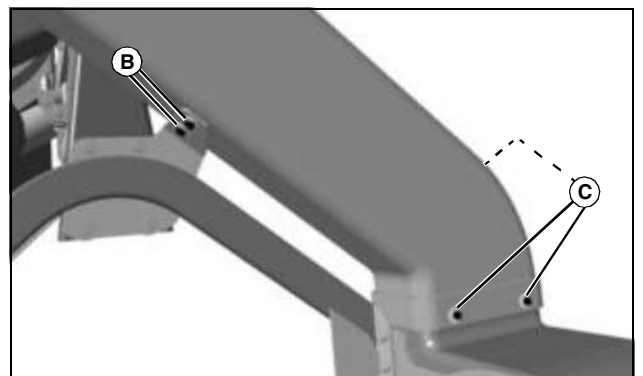
2. Line up the holes in blower housing (B) with the holes in MCS frame (A).
3. Install blower housing to MCS frame and secure with four nuts.

### Install Blower Chute



MX15624

1. Insert end of blower chute into opening (A) in MCS.



MX13183

2. Install two bolts (B) and washers to secure blower chute to the MCS frame.
3. Install four bolts, lockwashers and washers (C) to secure blower chute to blower housing.

# Preparing Vehicle

## Preparing Vehicle

### Machine Requirements

- Models 1425, 1435 and 1445 must be equipped with suitable roll-over protection. An operator's cab must not be used on these models if the MCS is installed.
- Model 1565 must be equipped with suitable roll-over protection or an operator's cab.
- Machine must have the optional Dual SCV Kit installed.
- Machine must have the Rear Auxiliary Hydraulic Outlet Kit installed.
- Machine must have a side discharge mower deck.
- Machine must have a mower deck chute adapter.

### Optional Equipment

- Support stands.
- Rear-view mirror.

### Adjust Four Wheel Drive (4WD) Linkage (Model 1565)

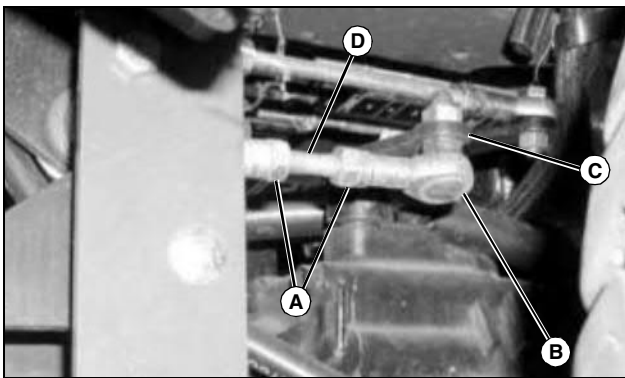
1. Park machine safely. (See Parking Safely in the Safety section.)



**CAUTION: Avoid injury! Use only a safe lifting device for raising machine.**

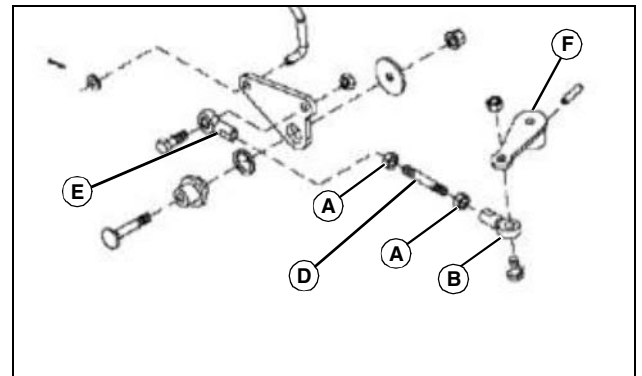
- Ensure machine is stable on the floor jack before lifting.
- Lower machine onto blocks or jack stands before loosening wheel bolts.

2. Remove right front wheel.



MX13189

3. Loosen both jam nuts (A) on the 4WD link.
4. Disconnect the front ball joint (B) on the 4WD link (D) from the 4WD arm (C) on the transaxle.

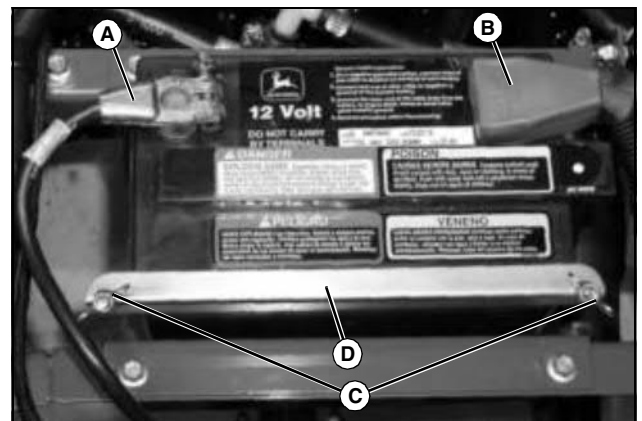


MX13194

5. Remove the link (D) from the rear ball joint (E).
6. Turn both jam nuts on the link (D) until they meet at the middle of the rod.
7. Screw the link (with the jam nuts) into the front ball joint (B) until the ball joint hits the jam nut or the ball joint bottoms out on the rod.
8. Tighten the jam nut.
9. Screw the link into the rear ball joint until the ball joint hits the jam nut or the ball joint bottoms out on the rod.
10. Install the front ball joint onto the 4WD arm (C) on the transaxle.
11. Tighten the jam nut on the rear ball joint.
12. Install right front wheel. Tighten wheel bolts to 225 N•m (165 lb-ft).
13. Lower machine to ground and remove floor jack.
14. Start the machine. 4WD control lever should go into the on demand (Automatic) 4WD and 4WD lock positions but not into 2WD.

### Install Belt Pulley

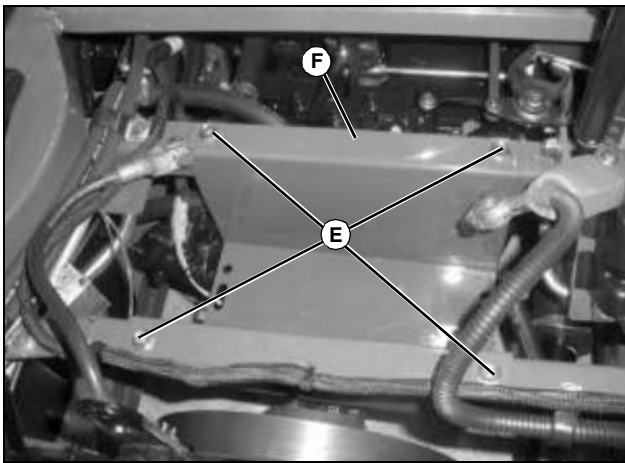
1. Park machine safely. (See Parking Safely in the SAFETY section.)



MX7062

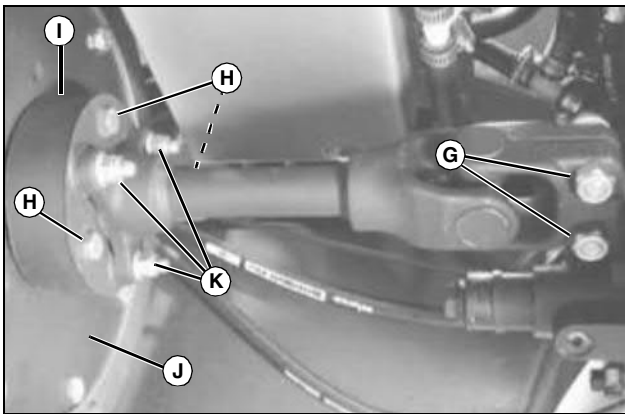
2. Remove negative battery (A) and positive battery cable (B).
3. Remove two wing nuts (C), and battery hold down bracket (D). Remove battery.

## Preparing Vehicle



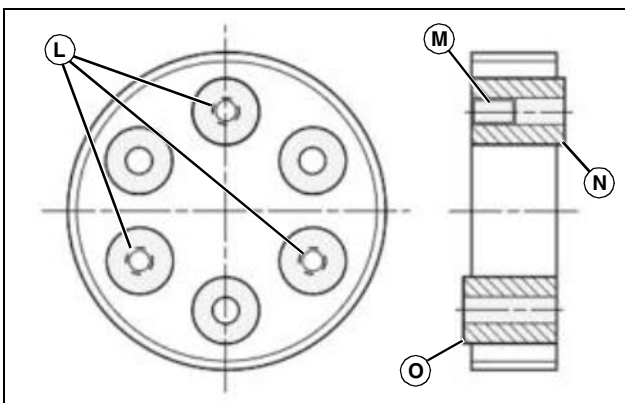
MX44970

4. Remove four bolts (E) and battery tray (F).



MX5442

5. Loosen two capscrews and nuts (G) on the driveshaft coupling.
6. Remove three bolts (H) securing the isolator (I) to the flywheel flex plate (J).
7. Slide the driveshaft away from the flywheel, allow the free end to hang down and remove the driveshaft from the machine.
8. Remove three locknuts (K) and bolts securing isolator to driveshaft. Remove and discard isolator (I).
9. Modify the replacement isolator as follows:



MX49196

- a. Three of the six cylindrical inserts (L) in the isolator are partially

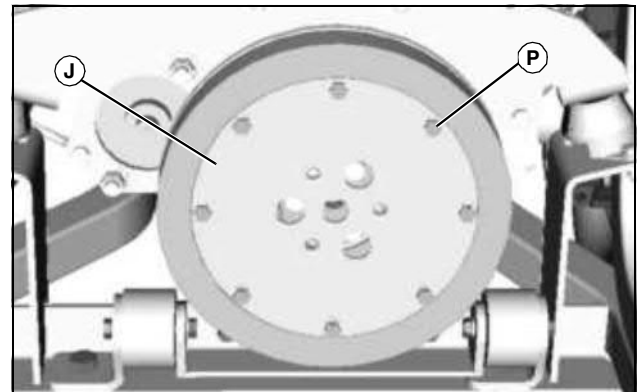
threaded. Drill the threads (M) out in each of these with a 10 mm drill.

b. Ensure that the 10 mm bolts used to attach the isolator to the driveshaft and flywheel flex plate slide freely in the isolator holes.

c. Three of the inserts (N) in the isolator are offset to one side, while the second set of three inserts (O) are offset to the opposite side. In the following step, insert the bolts into the isolator from the side of the insert that is flush with the isolator.

d. Position the raised portion of three inserts on one side of the isolator directly on the driveshaft flange. Install the three original bolts through the isolator and driveshaft flange and secure with locknuts.

10. Modify the flywheel flex (J) as follows:



MX50308

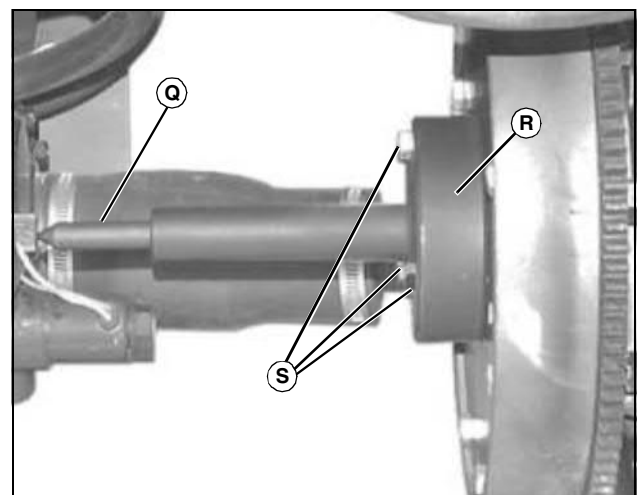
a. Remove and discard eight cap screws (P) securing the plate to the flywheel. Remove the plate.

b. Use a chamfer tool to counter-sink the rear face of eight holes in the plate so that the counter-sunk bolts provided in the kit will fit nearly flush in the holes.

c. Install the plate on the flywheel with eight 8x16 mm counter-sunk bolts provided. Tighten bolts to 32 N•m (24 lb-ft.).

**IMPORTANT: Avoid damage! Driveshaft alignment should must be checked anytime the driveshaft is removed from the flywheel.**

11. Check the driveline alignment:



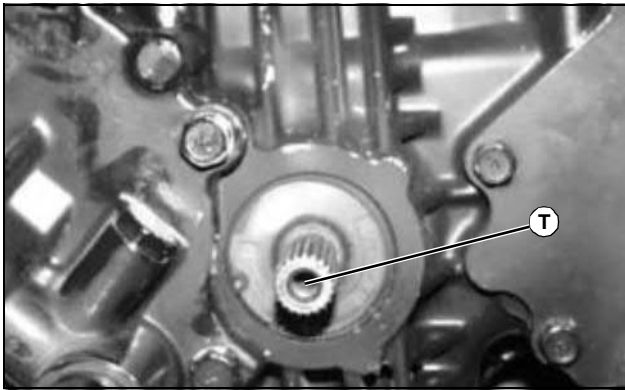
MX45085

- a. Install tool number JDG-1389-3 Short Pointer (Q) into tool number JDG-1389-1 Engine Alignment Tool Base (R).

## Preparing Vehicle

b. Install engine alignment tool base to flywheel flex plate and secure using three driveshaft mounting bolts (S).

c. Slide pointer out until it contacts the transaxle input shaft.

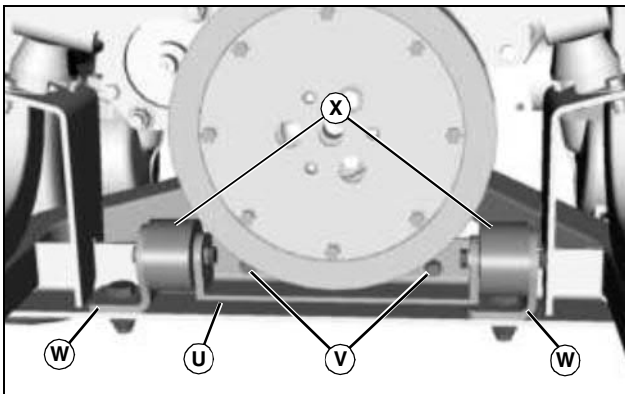


MX14377

d. Pointer (Q) should be centered in the end (T) of the input shaft.

e. If pointer is not centered, engine must be aligned. (See Removal and Installation of Engine Driveshaft in the machine Technical Manual.)

12. Install the driveshaft coupling on the transaxle shaft, allowing the driveshaft and isolator to hang freely.



MX50309

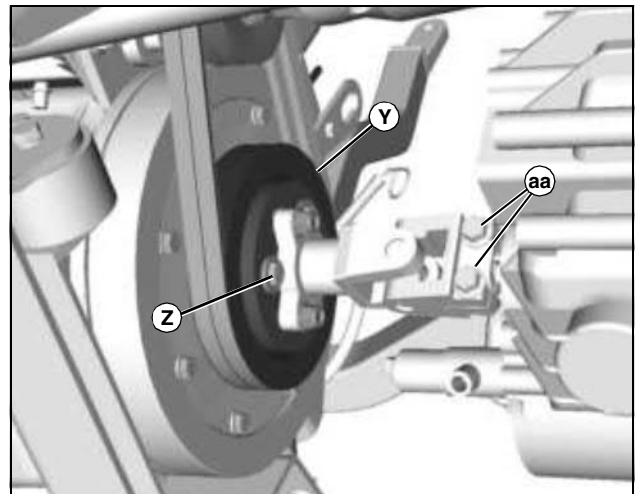
13. Install lower engine constraint bracket (U) on engine plate with two 8x25 bolts (V) and 8mm flat washers. Use existing frame and engine plate holes.

14. Loosely install two brackets (W) on machine frame with two M16x40 bolts, flat washers and locknuts.

15. Install two isolators (X) between brackets. Secure each isolator with two M8x10 bolts and lockwashers.

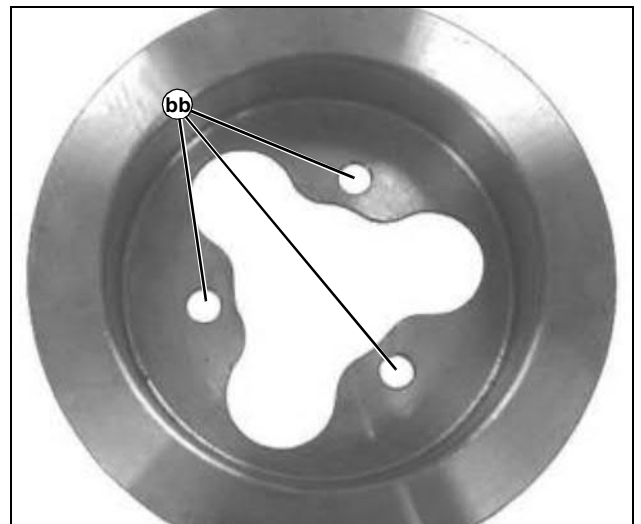
16. Tighten two M16x40 bolts installed earlier.

**NOTE:** Before installing the pulley, loop the shorter 2-belt set around the driveshaft so that it can be installed on the double pulley.



MX50310

17. Position the two-groove pulley (Y) and isolator/driveshaft assembly over the flywheel flex plate.



MX50305

18. Align three bolt holes in the pulley (bb) with the three open bolt holes in the isolator.

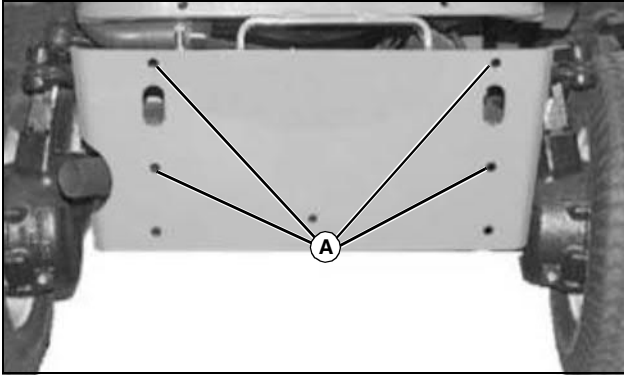
19. Apply medium strength thread lock to each of the three isolator bolts (Z - one shown), and install with flat washers through isolator and pulley. Tighten bolts securely.

20. Tighten two bolts (aa) and nuts on the universal coupler securely.

21. Install battery tray and battery.

# Preparing Vehicle

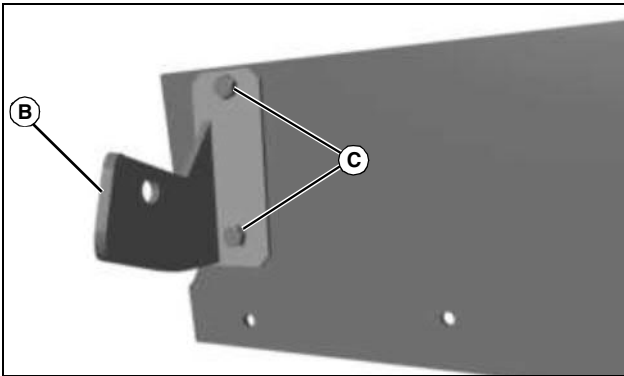
## Install Rear Support Brackets



MX15620

1. Locate the mounting holes (A) at the rear of the machine.

**NOTE: Do not tighten hardware. It may be necessary to adjust the brackets when installing the MCS.**



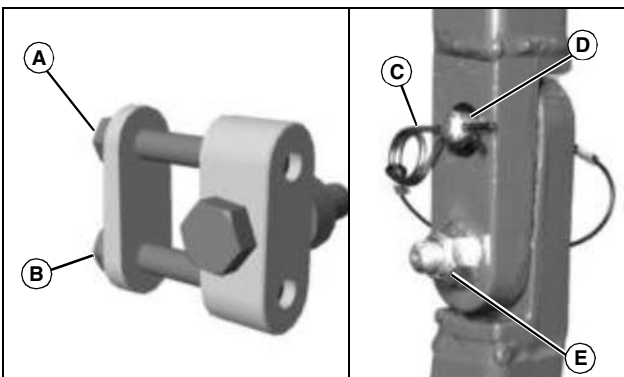
MX15622

2. Install the rear support bracket (B) in the mounting holes with the curve facing in. Secure each bracket to the machine with two M12x35 bolts (C) and M12 locknuts.

3. Repeat on other side.

## Install Rollover Protection System (ROPS) Brackets

### Installing on Machine without an Operator's Cab

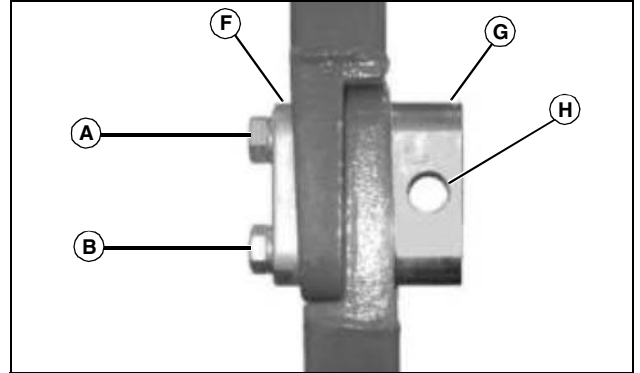


MX15603 MX4481

1. Remove bolts (A and B) from ROPS bracket.

**CAUTION: Avoid injury! The upper section of a folding ROPS can fall unexpectedly when the hinge hardware is all removed. Secure the upper portion of the ROPS with a safe lifting device before removing any hardware.**

2. Remove spring pin (C) from drilled pin (D) on ROPS. Remove drilled pin.



MX15602

**Picture Note: Bracket must be installed with hole (H) on outside of ROPS bracket.**

3. Insert bolt (A) through top hole (slim end) of inside bracket (F) and install on ROPS.

4. Insert bolt in top hole (wide end) of outside bracket (G).

5. Remove the bolt and nut (E) from lower hole in ROPS.

6. Line up both sides of bracket with ROPS.

**NOTE: Do not tighten hardware. It may be necessary to adjust the brackets when installing the MCS.**

7. Install bolt (B) on bottom of bracket.

8. Repeat on other side of ROPS.

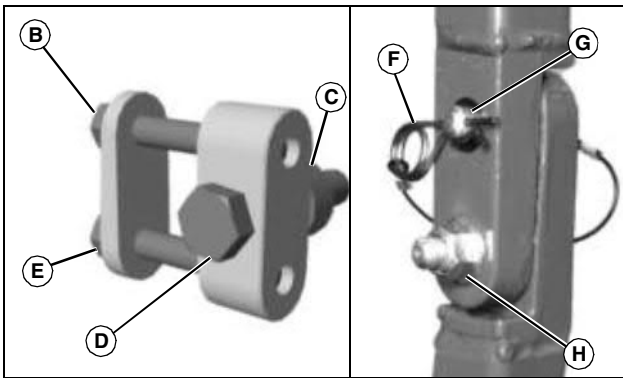
### Installing on Machines with an Operator's Cab



MX15615

1. Remove back panel (A) of operator's cab.

# Installing



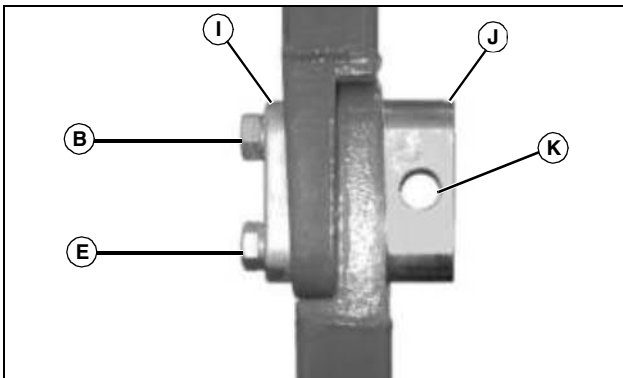
MX15603 MX4481

2. Remove bolts (B and E) from ROPS bracket.



**CAUTION: Avoid injury! The upper section of a folding ROPS can fall unexpectedly when the hinge hardware is all removed. Secure the upper portion of the ROPS with a safe lifting device before removing any hardware.**

3. Remove spring pin (F) from drilled pin (G) on ROPS. Remove drilled pin.



MX15602

**Picture Note: Bracket must be installed with hole (K) on outside of ROPS bracket.**

4. Insert bolt (B) through top hole (slim end) of inside bracket (I) and install on ROPS.

5. Insert bolt in top hole (wide end) of outside bracket (J).

6. Remove the bolt and nut (H) from lower hole in ROPS.

7. Line up both sides of bracket with ROPS.

**NOTE: Do not tighten hardware. It may be necessary to adjust the brackets when installing the MCS.**

8. Install bolt (E) on bottom of bracket.

9. Repeat on other side of ROPS.

10. Install the back panel.

11. Mark a hole for drilling that will be large enough for the spacer (C) to fit through. The hole should be 42-46mm (1-11/16 - 1-7/8 in.).

12. Drill hole in back panel.

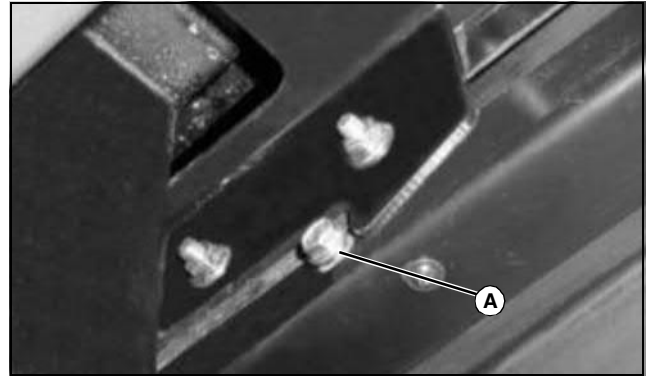
13. Install back panel on cab.

14. Install M20x100 bolt (D) and spacer (C) to verify that the hole is large enough. Drill hole out if necessary.

## Installing

### Removing Rear Bumper Weight

1. Park machine safely. (See Parking Safely in the Safety section.)
2. Open the engine cover by turning the latch handle counter-clockwise and sliding the cover rearward until it stops.
3. Remove hood - Early Models:



MX10665

**Picture Note: Early Model Shown**

- Remove cap screw (A) from inside edge of engine cover slides, on left and right side of machine.
  - Pull engine cover rearward until it can be removed from machine.
4. Remove hood - Series II:



**Suggest:**

**If the above button click is invalid.**

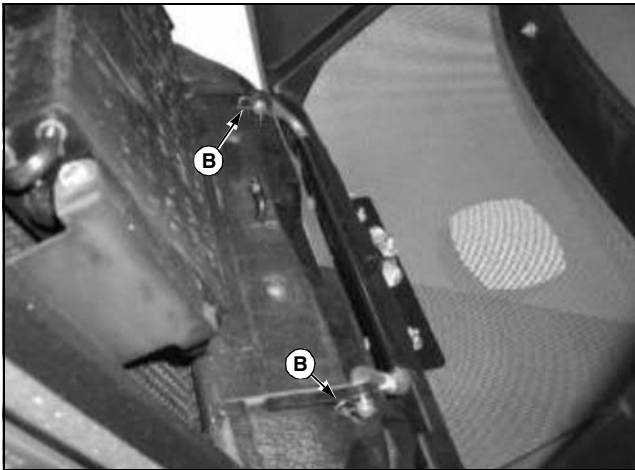
**Please download this document**

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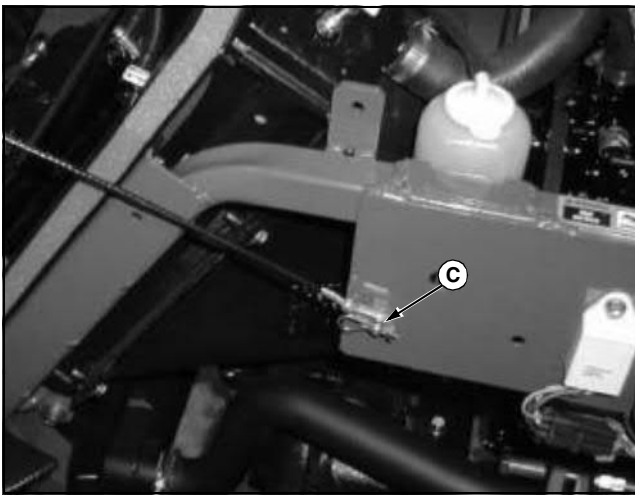
**to download the complete manual.**

**Thank you so much for reading**

# Installing



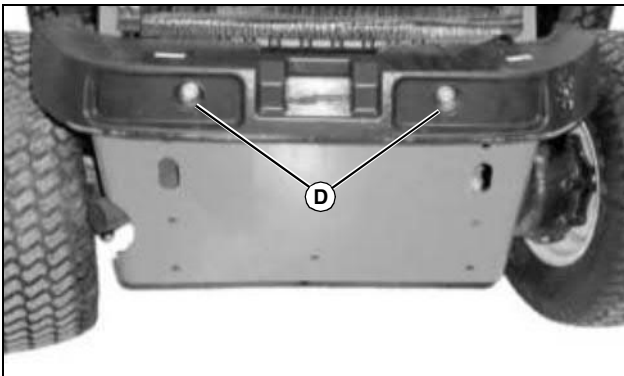
MX18718



MX18719

- Remove two spring pins (B) and lower hood to ground with cable still attached.
- Remove spring pin (C) and slide cable away from clevis pin.

**CAUTION: Avoid injury! Rear bumper weighs approximately 36 kg (80 lb).**



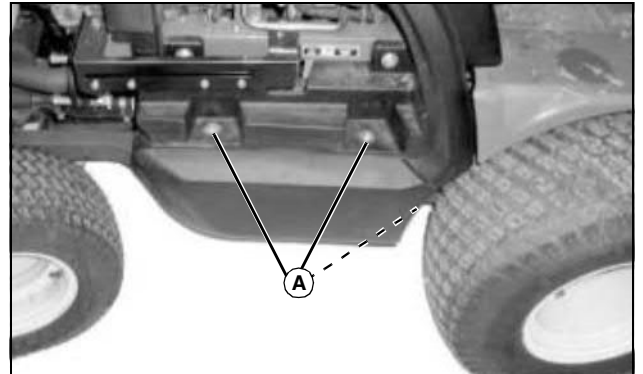
MX13188

- Picture Note: Early Model Shown**
5. Remove two bolts (D) and nuts securing bumper to machine.

6. Remove bumper.

## Removing Side Fender

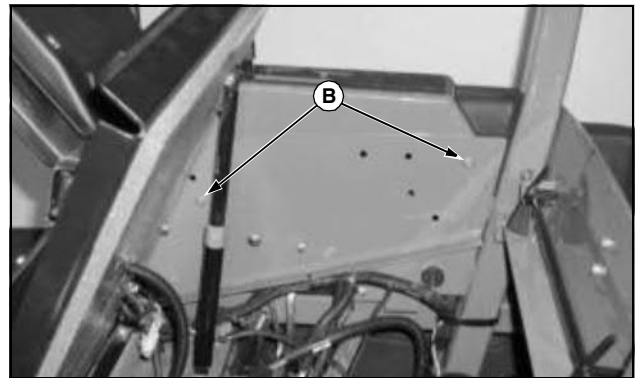
### Early Models



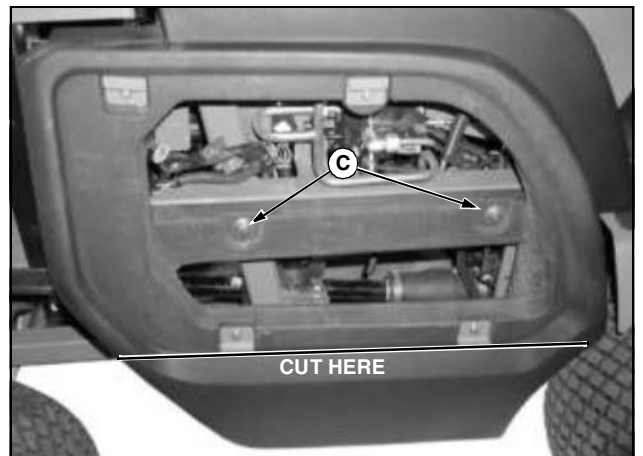
MX13186

1. Remove three bolts and washers (A) securing right side fender to the machine.
2. Remove fender.

### Series II



MX20064



MX20051

1. Remove right-side outer metal panel.
2. Remove two bolts (B). Remove two bolts and washers (C).
3. Remove side panel.
4. Cut off lower part of panel just below lower clips at location shown.

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