

Material Collection System 14-Bushel Dump From Seat



JOHN DEERE

OPERATOR'S MANUAL

Material Collection System 14- Bushel Dump From Seat

OMTCU35716 ISSUE C6 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.
Additional Proposition 65 Warnings can be found in this manual.

John Deere Turf Care

North American Edition
Printed in U.S.A.

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 14 Bushel Hopper is compatible with the Z997R ZTrak.

Record Identification Numbers

Blower

Serial Number (075001-)

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.



TCAL45109—UN—10APR13

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT SERIAL NUMBER (A):

Hopper

Serial Number (010001 -)

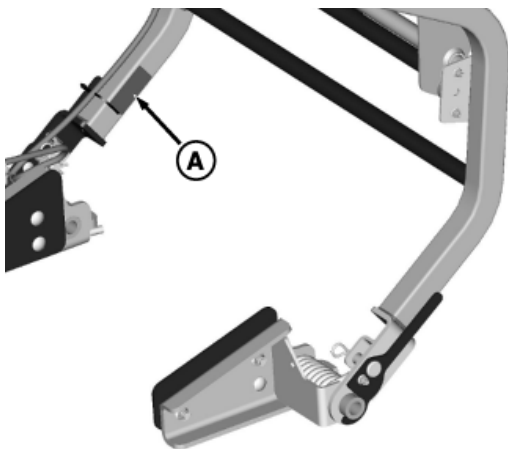
If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

You will need to locate the serial number (A) for the attachment. Record the information in the spaces provided below.

Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication.

The right is reserved to make changes at any time without notice.

Safety Labels—Text



TCT009676—UN—19DEC13

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT SERIAL NUMBER (A):

Safety Labels—Text

Understanding The Machine Safety Labels



MXAL42363—UN—22MAY13

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.

Replace missing or damaged safety labels. Use this operator's manual for correct safety label placement.

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

French or Spanish Safety Labels and Operator's Manual

Operator's manuals and safety labels with content in French or Spanish are available for this machine through authorized John Deere dealers. See your John Deere dealer.

NOTE: Both text and no-text labels are shown. Your machine is only equipped with one of these types of labels.

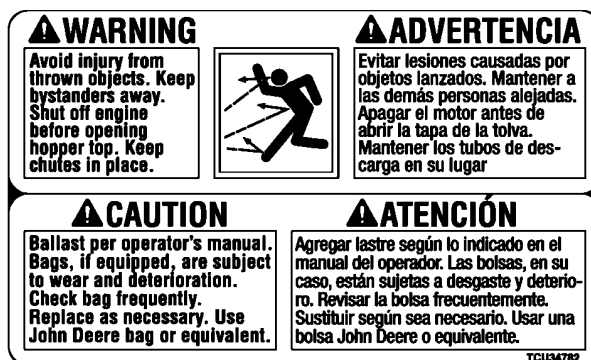
Danger



TCAL45111—UN—10APR13

Avoid injury from rotating blade and thrown objects. Do not operate blower without entire grass catcher in place. Shut engine off before unclogging or servicing.

Warning/Caution



TCAL45113—UN—10APR13

WARNING

To avoid injury from thrown objects. Keep bystanders away. Shut off engine before opening hopper top. Keep chutes in place.

CAUTION

Ballast per operator's manual. Bags, if equipped, are subject to wear and deterioration. Check bag frequently. Replace as necessary. Use John Deere bag or equivalent.

Warning



TCT009677—UN—19DEC13

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

Safety Labels—No Text

Warning



TCAL45115—UN—10APR13

- To avoid injury from rotating belts, keep all shields and guards in place.

Safety Labels—No Text

Understanding The No-Text Machine Safety Labels

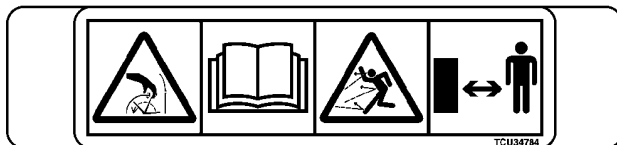


TCT005498—UN—11SEP12

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.

Avoid Injury From Rotating Blades and Thrown Objects



TCT009678—UN—19DEC13

Avoid injury from rotating blade and thrown objects. Do not operate blower without entire grass catcher in place. Shut engine off before unclogging or servicing.

Avoid Injury From Thrown Objects, Ballast Per Operator Manual



TCT009680—UN—19DEC13

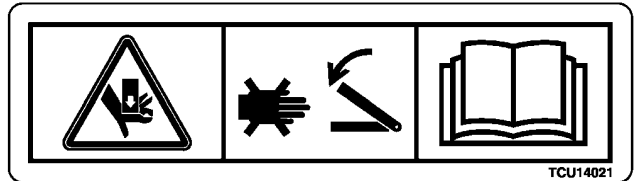
WARNING

To avoid injury from thrown objects. Keep bystanders away. Shut off engine before opening hopper top. Keep chutes in place.

CAUTION

Ballast per operator's manual. Bags, if equipped, are subject to wear and deterioration. Check bag frequently. Replace as necessary. Use John Deere bag or equivalent.

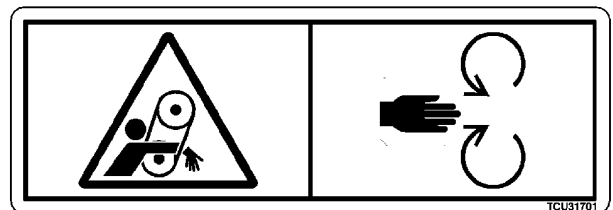
Avoid Injury to Hands and Fingers



TCT009681—UN—19DEC13

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

Avoid Injury From Rotating Belts



TCT009682—UN—03FEB14

To avoid injury from rotating belts, keep all shields and guards 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.

Safety

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.
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



TCAL41689—UN—08APR13

- 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



TCAL46317—UN—15APR13

- 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.

Preparing Vehicle

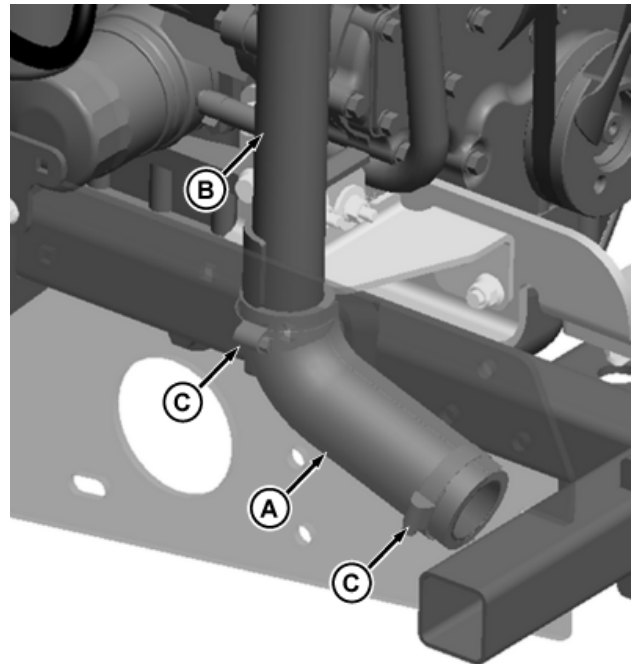
- Securely support any machine or attachment elements that must be raised for service work. Use jack stands or lock service latches to support components when needed.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace 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

Hopper Parts List

Qty.	Description
2	Pin, Spring Locking
1	Switch, Rocker
3	Clamp, Coated
1	Weldment, Mount, Right
1	Weldment, Mount, Left
1	Tub-Door, Hopper With Labels
2	Plate, Frame Reinforcement
1	Bolt, Carriage, M8x25
1	Locknut, M8
10	Bolt, Carriage M12x40
1	Washer, 25 mm O.D.
2	Pin, With Cable
6	Locknut, M12
4	Bolt, Carriage M12x30
4	Locknut, M12
3	Screw, M8x20

Assemble Exhaust Shield to Tail Pipe



TCT011381—UN—13AUG14

Frame member shown transparent for clarity of exhaust shield location

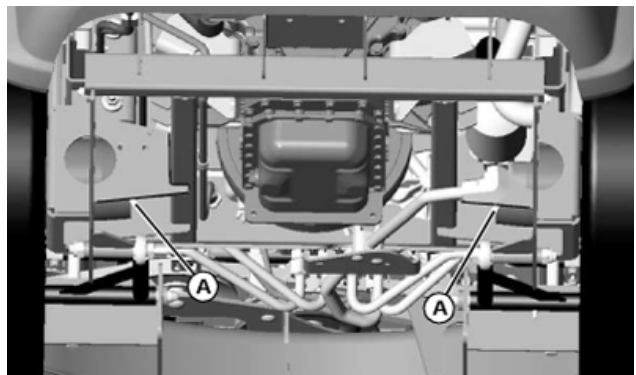
1. Place exhaust shield (A) halves around lower bend in tail pipe (B).
2. Secure shield to pipe using both provided clamps (C).

Remove Drive Wheels

CAUTION: The machine can fall or slip from an unsafe lifting device or supports.

- Use a safe lifting device rated for the load to be lifted.
- Lower machine onto jack stands or other stable supports and block wheels before servicing.

IMPORTANT: Lift machine at specified points on frame. Using rear bumper as a lift point can damage the frame.



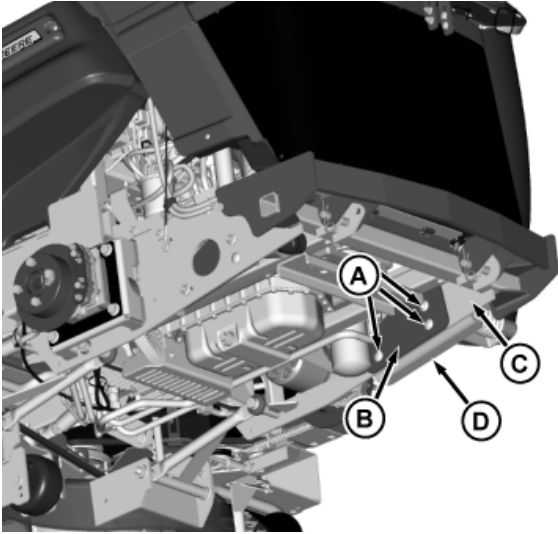
TCAL43863—UN—21MAR13

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Remove hood.
3. Slightly loosen four wheel nuts.
4. Lift rear end of machine with a safe lifting device centered under tire support frame (A) on the side the tire is being removed.

Preparing Vehicle

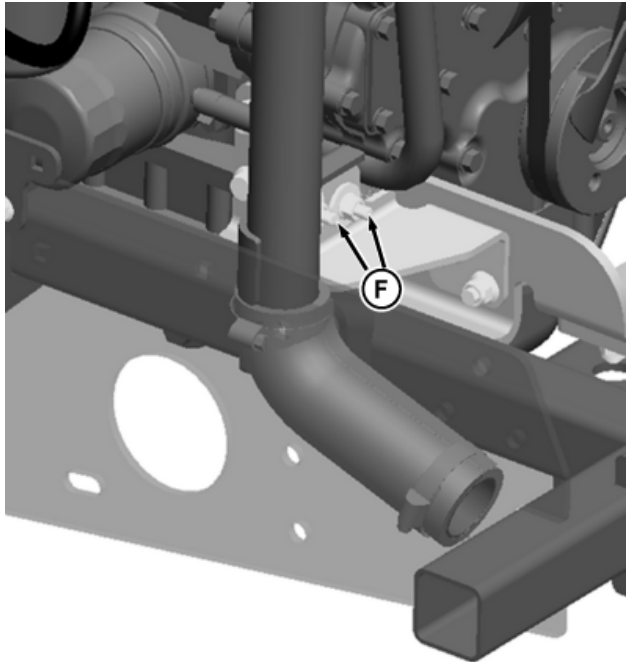
5. Place machine on jack stands.
6. Remove wheel nuts.
7. Remove wheel.

Install Frame Brackets



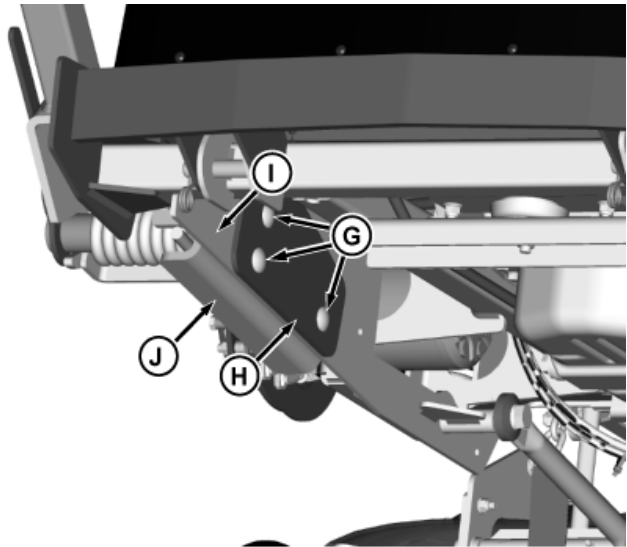
TCT009683—UN—05AUG14

1. Install three M12x40 carriage bolts (A) through plate (B) and right side frame (C).
2. Install right mounting bracket (D) over bolts and secure to frame with three M12 flange locknuts.



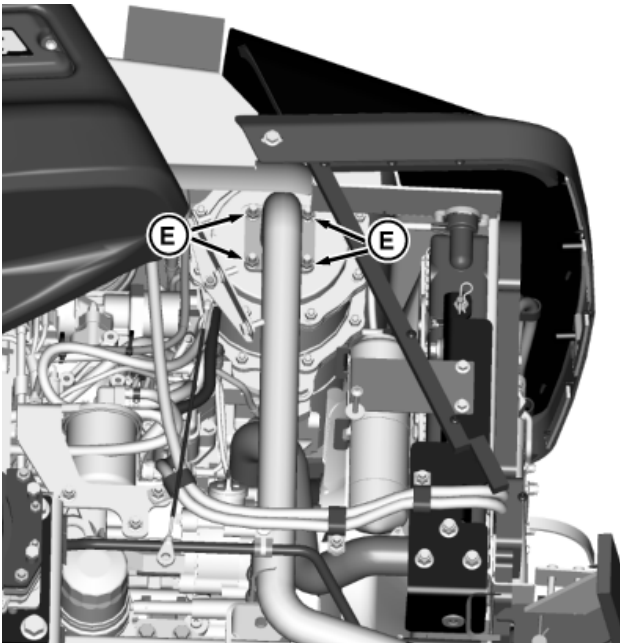
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3. Remove four M8 nuts (E) and two M8x30 carriage bolts (F) to remove tail pipe.



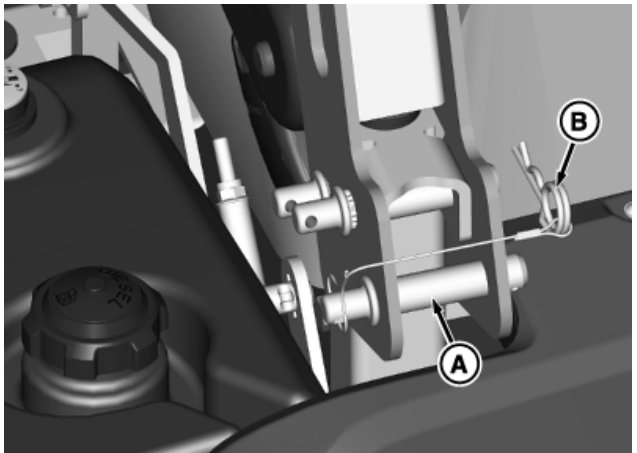
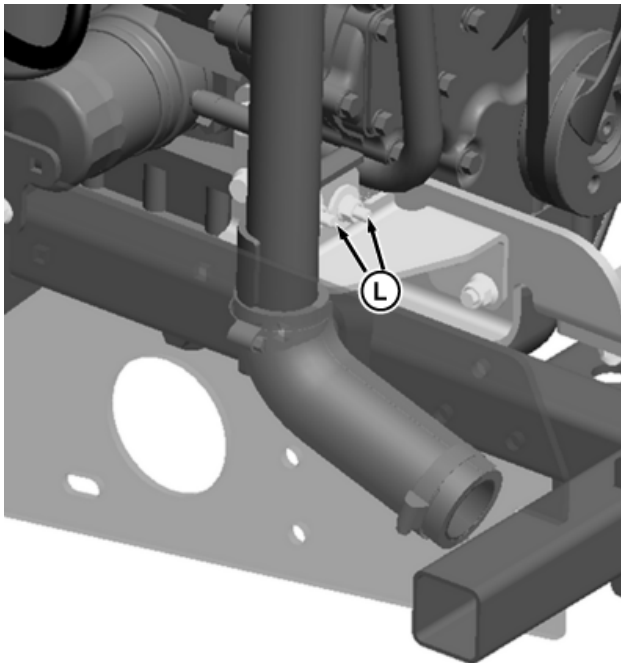
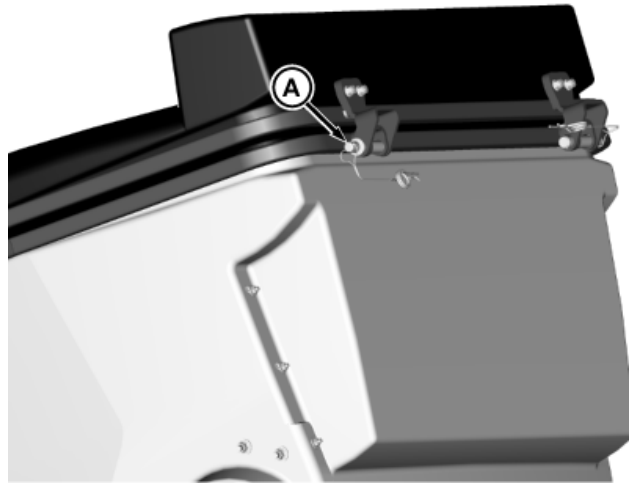
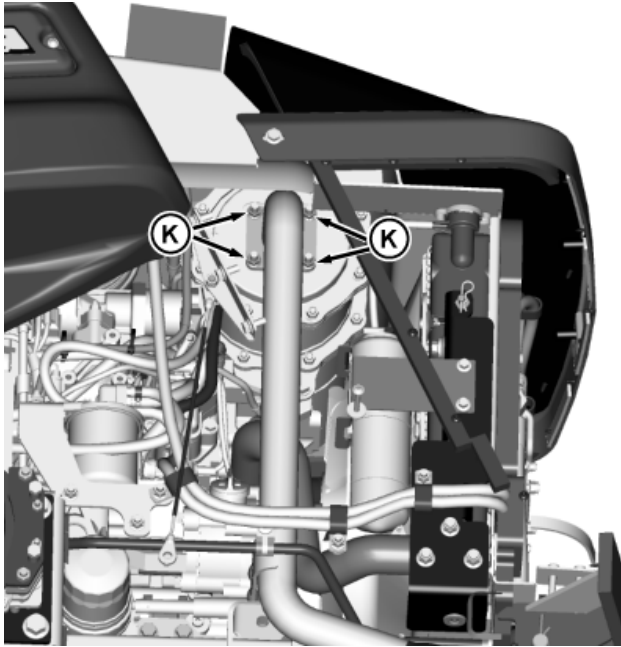
TCT011387—UN—06AUG14

4. Install three M12x40 carriage bolts (G) through plate (H) and left side frame (I).
5. Install left mounting bracket (J) over bolts and secure to frame with three M12 flange locknuts.
6. Tighten hardware on right and left side mounting brackets.



TCT011385—UN—06AUG14

Preparing Vehicle



Viewed from left rear of machine.

1. Remove pin (A) from hopper door.
2. Install upper mounting pin (A) in rear hole of ROPS bracket.
3. Secure to ROPS bracket using spring locking pin (B).
4. Repeat for right side.

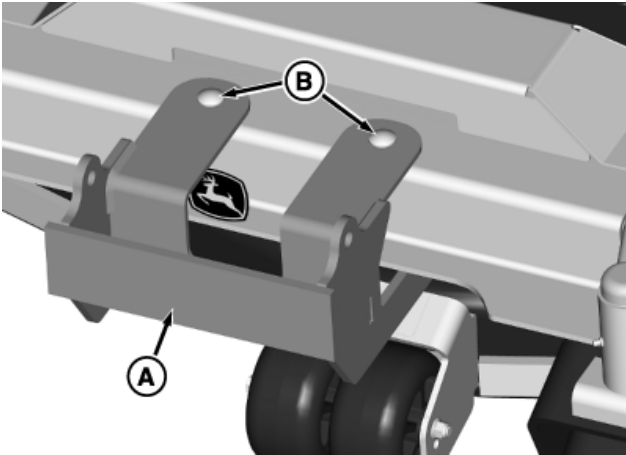
7. Install tail pipe using four M8 nuts (K). Tighten, in a cross pattern, to 28.5 N·m (21 lb.-ft.). Double check torque when done.
8. Install two new M8x30 carriage bolts (L) and two new M8 crown nuts (from kit).

Install ROPS Mounting Pin

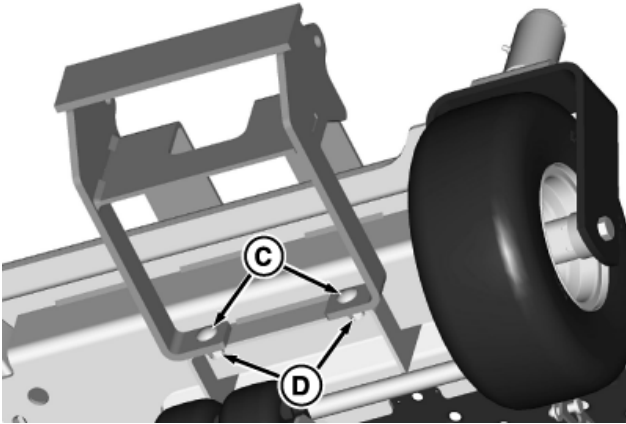
IMPORTANT: Use pin (A) from hopper door for this step. (See Install Hopper Assembly Onto Hopper Frame in the Assembly section.)

Preparing Vehicle

Install Front Ballast Bracket



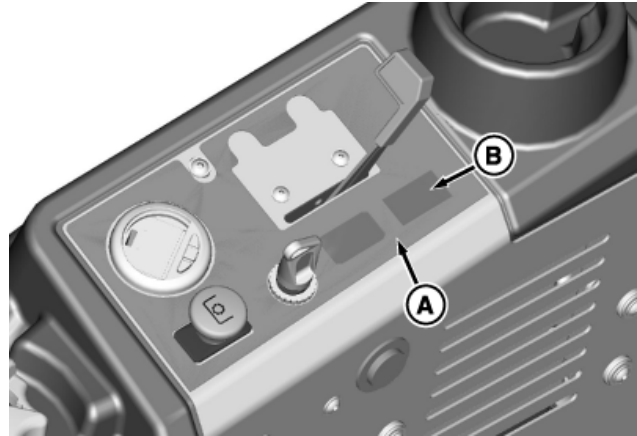
1. Install front weight bracket (A) into upper holes using two M12x40 carriage bolts (B) and two M12 locknuts.



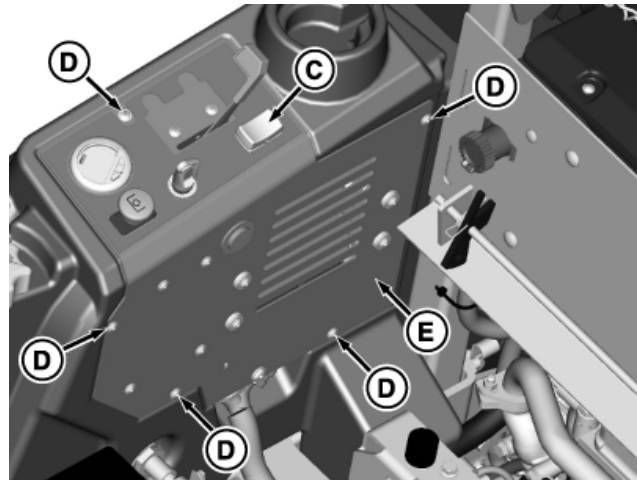
2. Install front weight bracket into lower holes using two M12x40 carriage bolts (C) and two M12 locknuts (D).

Install Wiring Harness (Front)

1. Raise or remove seat.

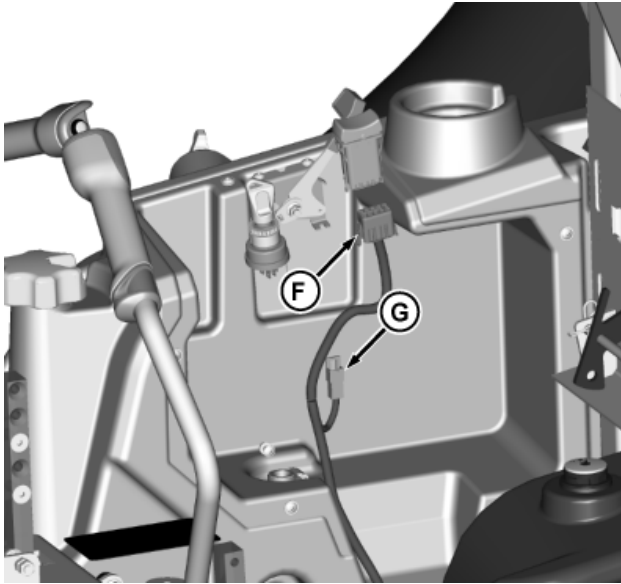


2. Cut through label (A) to expose hole (B) for switch.

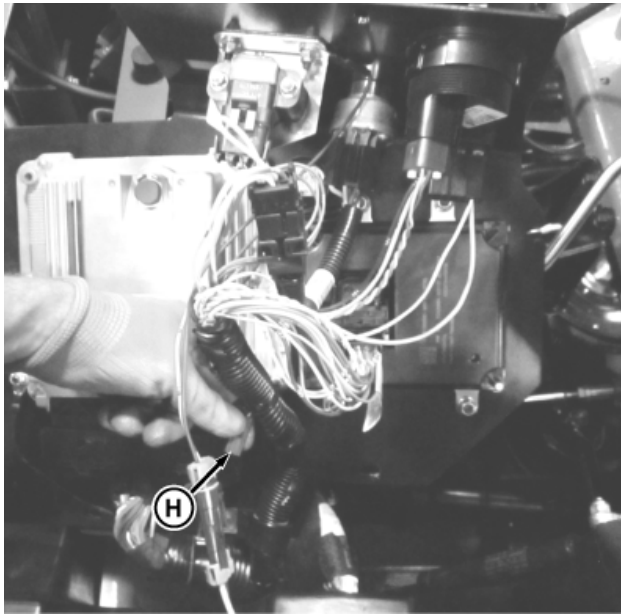


3. Install switch (C) into panel.
NOTE: Switch must have notch facing towards the operator.
4. Remove and retain five screws (D). Carefully remove panel (E) from console and set aside.

Preparing Vehicle

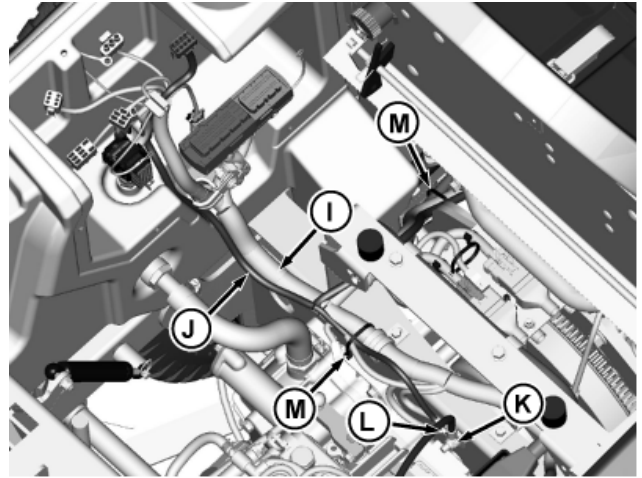


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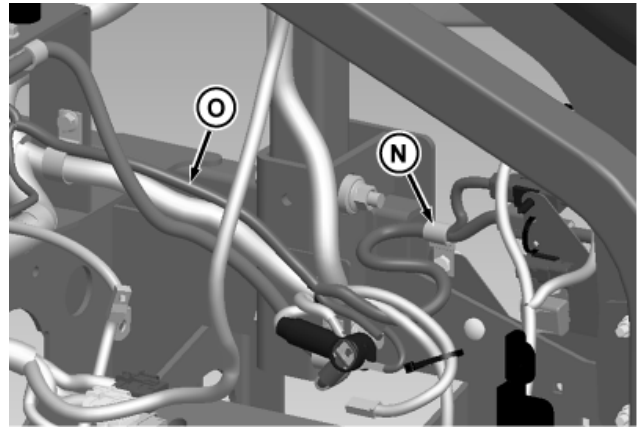
TCT011398—UN—22AUG14

5. Connect switch to connector (F). Connect connector (G) from MCS harness to connector (H) from main wiring harness.



TCT009697—UN—25AUG14

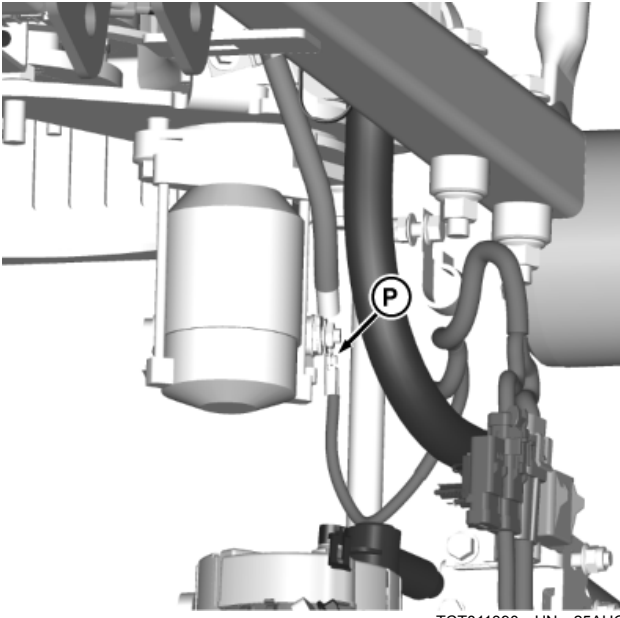
6. Route front harness (J) along main harness (I). Secure to main harness with tie straps (M).
7. To ground stud remove nut (K) and install ring terminal (L) of black wire.
8. Plug connector into switch installed earlier.
9. Install panel to console with five screws removed earlier.



TCT009698—UN—25AUG14

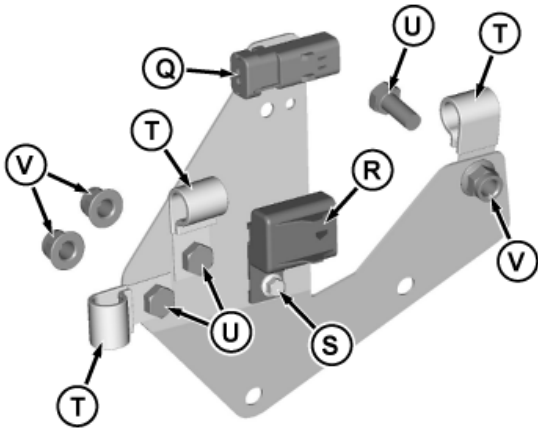
10. Continue to route front harness (O) along main harness and secure with tie straps.
11. Insert front harness into P-clip (N) as shown.

Preparing Vehicle



TCT011390—UN—25AUG14

12. Install ring terminal of red wire (P) to starter terminal.

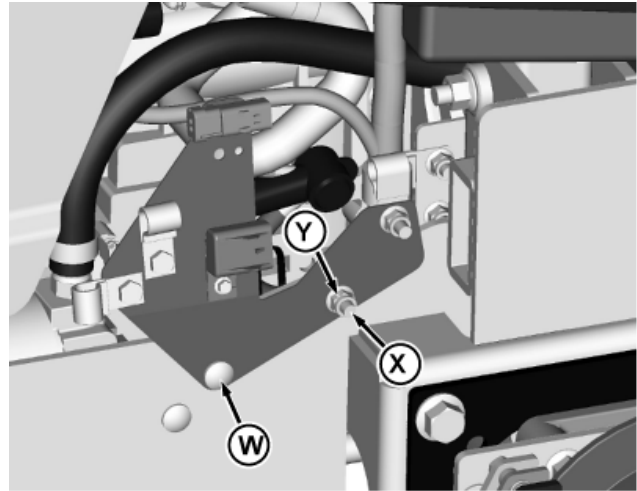


TCT009695—UN—25AUG14

13. Assemble harness plate:

NOTE: Connectors (Q) and (R) come taped to the harness. Cut them from the harness and install as shown. These connectors are used for storing harness plugs when MCS is removed.

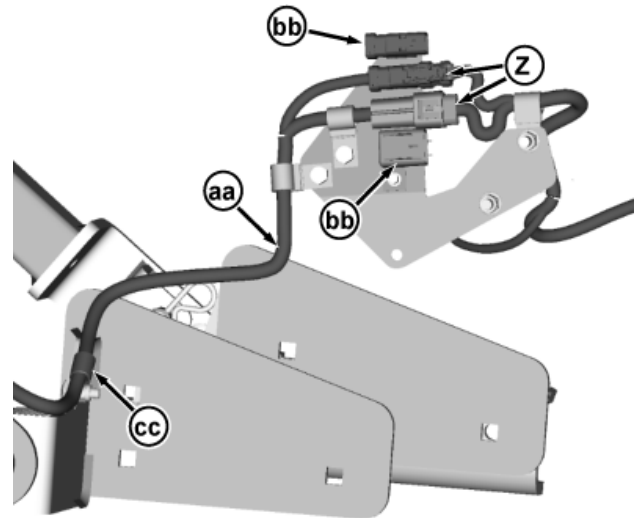
- a. Snap connector (Q) into top two holes of plate.
- b. Secure connector (R) to plate with M6 self-tapping screw (S).
- c. Install three P-clips (T) to plate as shown. Secure with three M8x20 hex head bolts (U) and M8 locknuts (V).



TCT009696—UN—25AUG14

14. Install harness plate to vehicle:
 - a. Remove and retain carriage bolt and nut (W) from filter head.
 - b. Position plate over holes in frame. Loosely secure plate to frame with M8x25 carriage bolt (X) and M8 locknut (Y).
 - c. Install carriage bolt and nut (L) removed earlier.
 - d. Tighten hardware.

IMPORTANT: MCS side connectors (aa) will be connected later.



TCT010460—UN—25AUG14

15. Plug in machine side connectors (Z). Connectors (bb) will come in on wire harness, taped to harness. Cut from harness and install as shown on bracket. (these connectors are used for storing harness plugs when MCS is removed).
16. Route harness (aa) through p-clamp (cc).

Installing Drive Wheels

1. Install wheels.
2. Install wheel nuts.
3. Tighten wheel nuts.

Assembly

4. Lower machine.

Assembly

Blower Assembly Parts List

72 Inch SD

Qty	Description
1	Bracket, Blower
1	Boot, Deflector
1	Belt
1	Pulley
1	Bracket, Mount
1	Bracket, Blower Mount
1	Lever, Lock
1	Support, Cover
1	Bracket, Cover Support
1	Cover
1	Latch
1	Plate, Deflector
1	Hinge
6	Bolt, Carriage, M6x20
1	Screw, Socket Head
4	Screw, M6x16
5	Bolt, Carriage, M8x25
2	Screw, M8x25
1	Bolt, Carriage, M8x35
2	Screw, M8x40
6	Screw, Pan Head
7	Locknut, M6
4	Nut, M6
5	Locknut, M8
1	Retainer
6	Nut, M6
4	Washer, M8.4

60 Inch SD

Qty	Description
1	Bracket, Blower
1	Boot, Deflector
1	Belt
1	Pulley
1	Bracket, Support Mount
1	Bracket, Blower Mount
1	Lever, Lock
1	Support, Cover
1	Bracket, Cover Support
1	Cover
1	Latch
1	Plate, Deflector
1	Hinge
6	Bolt, Carriage, M6x20

Qty	Description
1	Screw, Socket Head
5	Bolt, Carriage, M8x25
2	Screw, M8x25
1	Bolt, Carriage, M8x35
2	Screw, M8x40
6	Screw, Pan Head
7	Locknut, M6
5	Locknut, M8
1	Retainer
6	Nut, M6
4	Washer
4	Washer, M8.4

60 Inch MOD

Qty	Description
1	Bracket, Blower Mount
1	Bracket, Support Mount
1	Bracket, Mount
1	Cover
1	Sheave
1	Lever, Lock
1	Pawl, Mode Latch
1	Plate, Lever Latch
1	Gate
1	Plate, Gate Extension
1	Mount
1	Lever, Release
1	Link, Latch
1	Spring
1	Grip
1	Plate, Blower Plate
1	Belt
1	Support, Cover
1	Bracket, Cover Support
1	Cover
1	Latch
1	Plate, Deflector
1	Deflector, Hinge
1	Screw, Socket Head
4	Bolt, Carriage, M8x25
2	Screw, M8x25
1	Bolt, Carriage, M6x30
3	Screw, Shoulder, M6x23
2	Bolt, Carriage, M6x16
4	Bolt, Carriage, M6x20
2	Bolt, Carriage, M8x20
2	Screw, M8x40
1	Bolt, Carriage, M8x35
5	Screw, Pan Head
5	Locknut, M6
6	Locknut, M8
3	Locknut, M6
3	Nut, M6

Assembly

Qty	Description
5	Nut, M6
4	Washer
1	Washer, M8.4
1	Washer
4	Washer, M8.4
2	Cotter Pin
1	Shim
1	Retainer

Install Sheaves

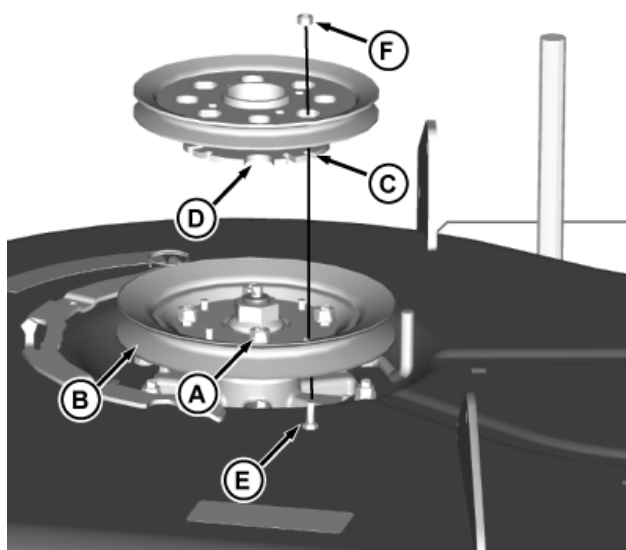
1. Remove belt shield on discharge chute side of mower deck.

CAUTION: Help prevent bodily injury. Before removing belt shield:

- Stop engine and wait for all moving parts to stop.
- Prevent burns by allowing engine to cool.
- Disconnect spark plug wire.
- Wear protective gloves when service is performed within the mower blade area.
- Do not operate mower without belt shield.

2. Release tension from mower deck belt.

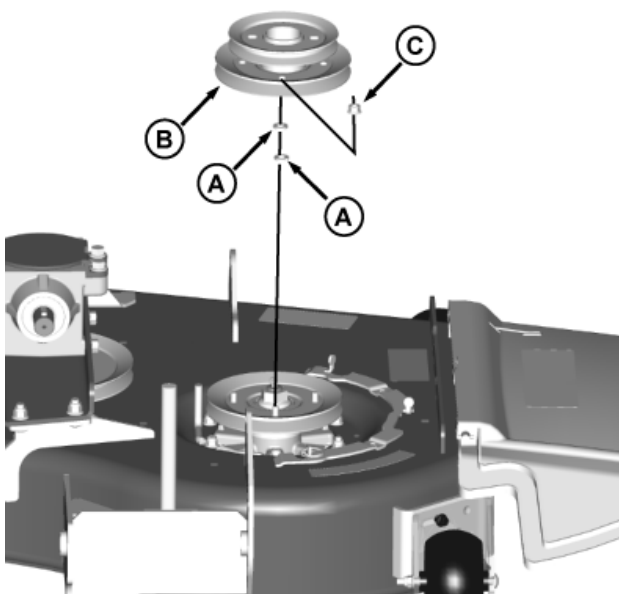
72-Inch SD Deck



TCT011391—UN—12AUG14

1. Remove four nuts (A). Raise sheave (B) to allow room to install hex head bolt (E).
2. Install MCS sheave onto sheave (B) using four M6x16 hex head bolts (E).
3. Install nuts (A) through large slots (D).
4. Install M6 locknuts (F) onto M6x16 bolts (E).
5. Reset the belt tension per manual or label on deck.

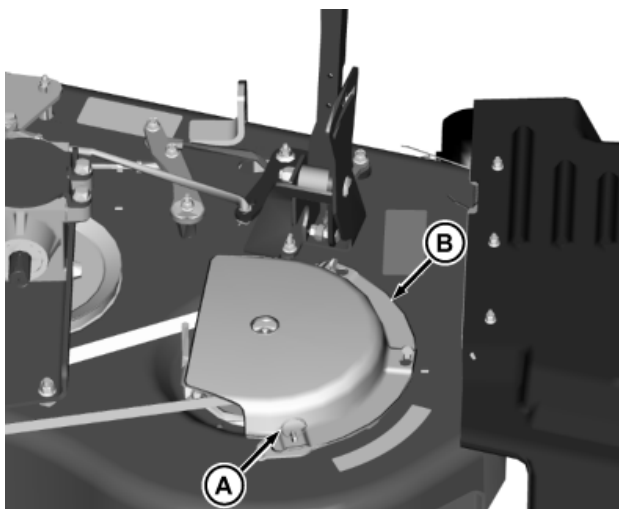
60-Inch SD Decks



TCT011392—UN—12AUG14

1. Install one more washer (A) on each bolt for total of two 10M washers on each bolt under the double sheave (B).
2. Install double sheave (B) and secure using four M8 nuts (C).
3. Reset the belt tension per manual or label on deck.

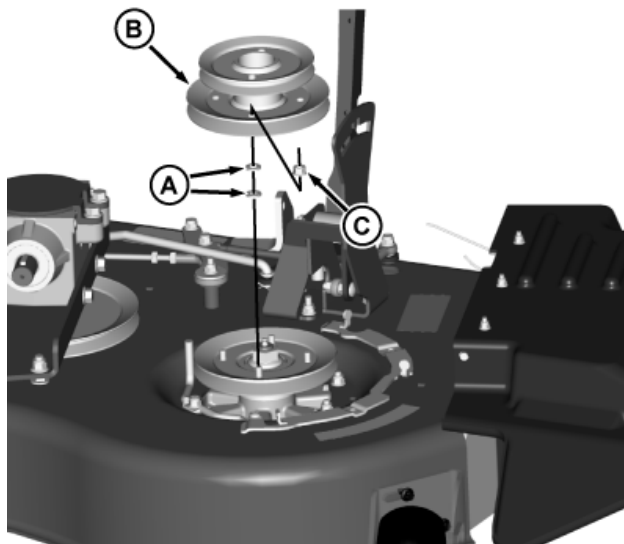
60-Inch MOD Decks



TCT011393—UN—19AUG14

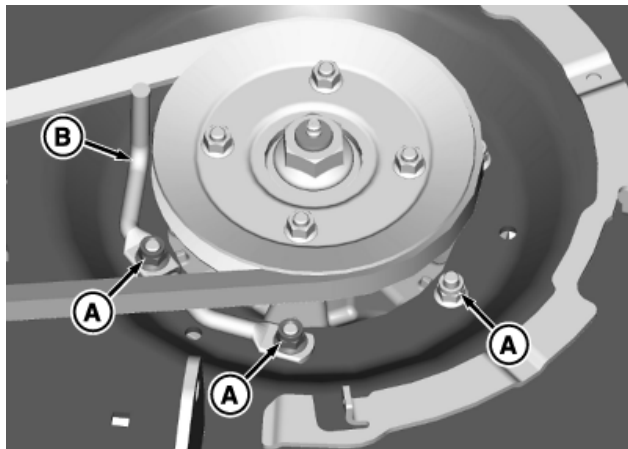
1. Remove retaining ring (A).
2. Lift and twist shield (B) counter clockwise to remove.

Assembly

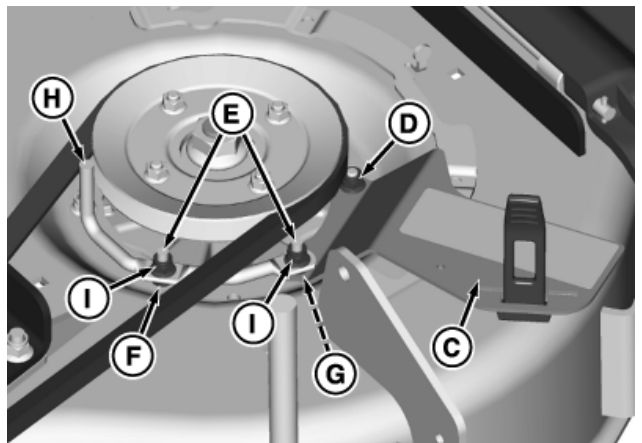


3. Install one more washer (A) on each bolt for total of two 10M washers on each bolt under the double sheave (B).
4. Install double sheave (B) and secure using four M8 nuts (C).
5. Reset the belt tension per manual or label on deck.

Install Brackets for Mower Deck Sheave Cover

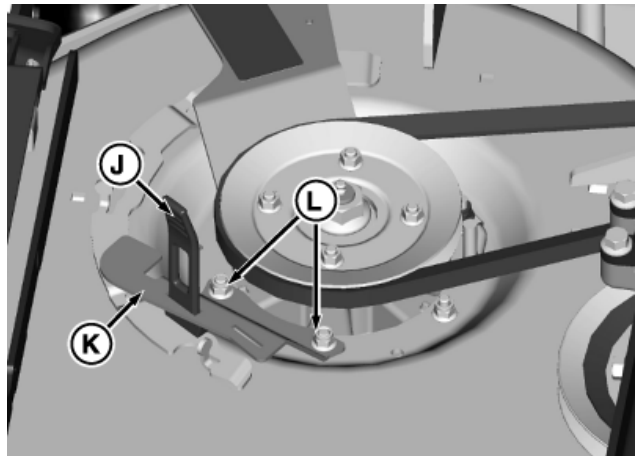


1. Remove and retain nuts (A). Remove debris guard guide (B).



Viewed from right rear of mower deck.

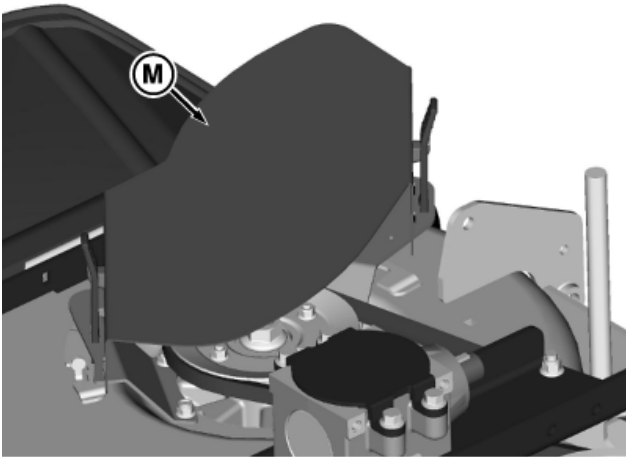
2. Install rear support bracket assembly with label (C) at the rear of the right side spindle as shown.
3. Loosely secure rear support bracket assembly with nut (D) removed earlier.
4. Replace the spindle stud bolts with two M8x40 mm hex flange head bolts (E).
5. Use three M8 washers (F) between the deck shell and the debris guard guide.
6. Use one M8 washer (G) on top of the rear support bracket assembly.
7. Install debris guard guide (H) on top of the washers.
8. Install nuts (I) removed earlier finger tight.



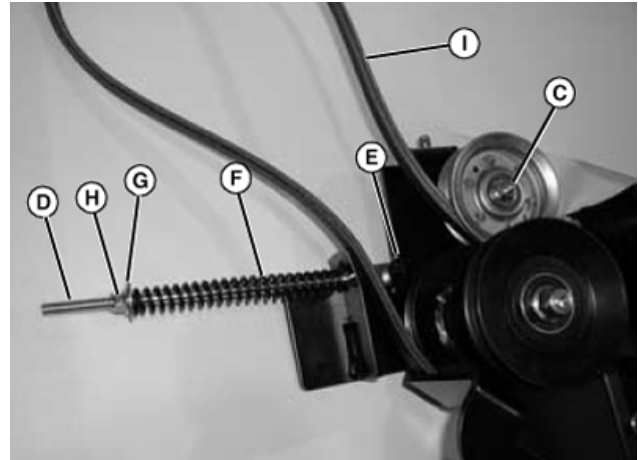
Viewed from front of mower deck.

9. Install rubber latch (J) through the front support bracket (K).
10. Remove and retain existing nuts (L).
11. Install front support bracket over spindle studs.
12. Install nuts removed earlier finger tight.

Assembly



TCT009692—UN—09JAN14



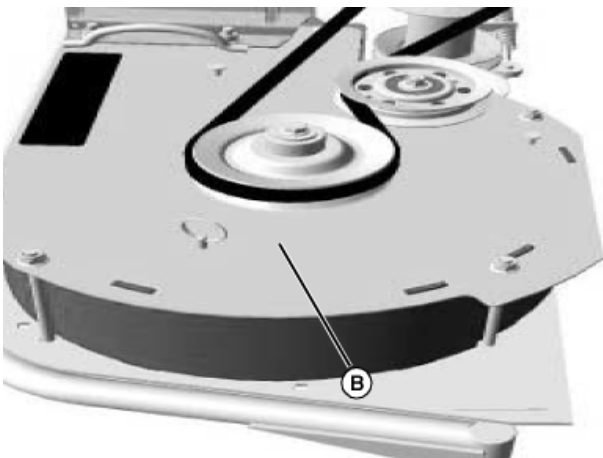
TCAL45122—UN—10APR13

13. Place belt cover (M) on brackets to ensure proper fit up.
14. Tighten all hardware and remove cover.

Assemble Blower

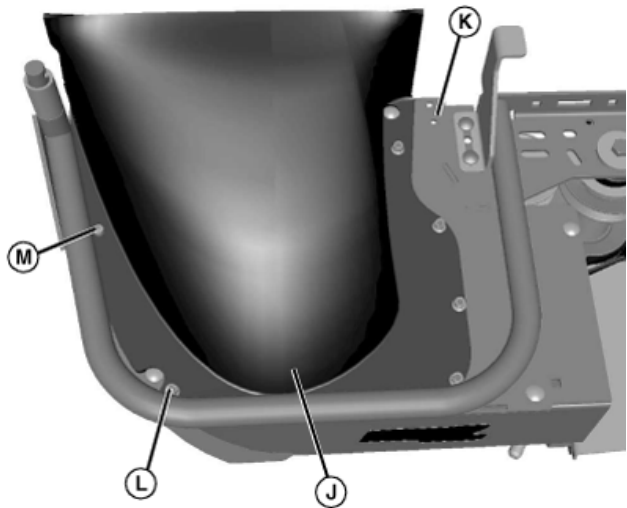


TCAL45120—UN—10APR13



TCAL45121—UN—10APR13

2. Loosen bolt (C) on idler pulley.
3. Install primary tension rod (D), retaining clip (E), spring (F), washer (G), and locknut (H).
- NOTE: Use shorter belt for 60 in. mower decks and longer belt for 72 in. mower decks.
4. Install primary drive belt (I).
5. Tighten bolt on idler pulley.
6. Install, adjust, and tighten secondary drive belt (B).
7. Install belt guard (A).



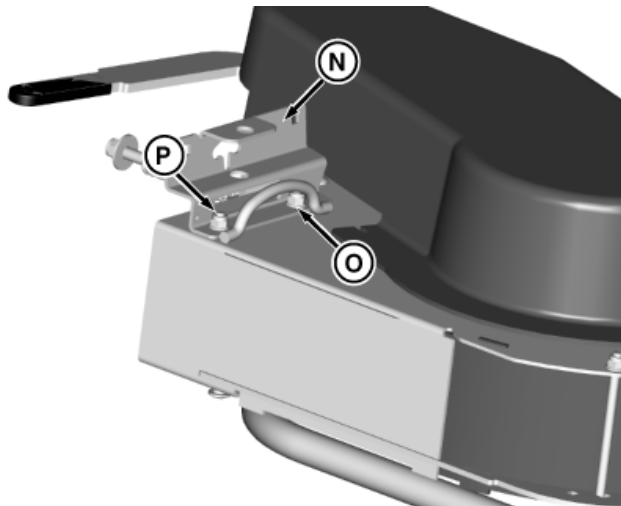
TCAL45123—UN—10APR13

Hex socket head bolt (M) must be installed in this location.

8. Install blower boot (J) on the bottom of blower housing (K). Install using six M6x20 carriage bolts (L) and one M6x20 hex socket head bolt (M) with M6 locknuts.

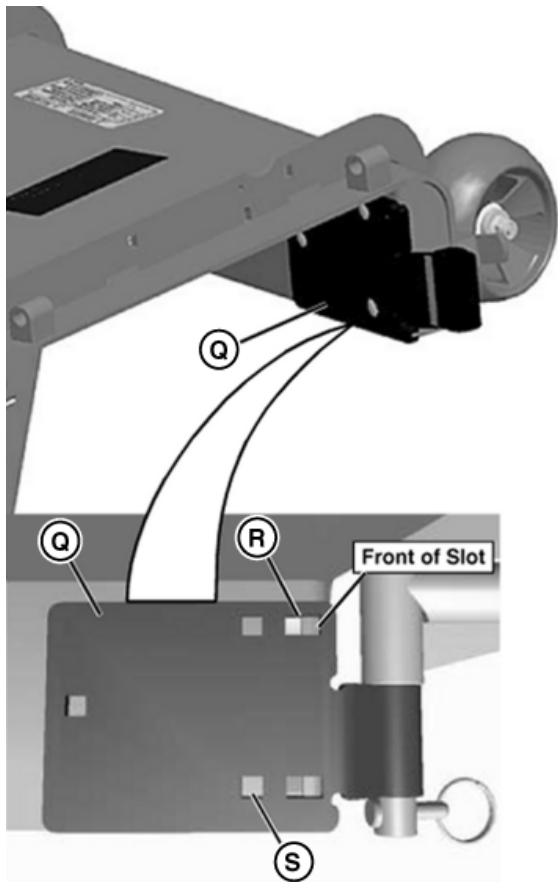
1. Remove belt guard (A) and secondary drive belt (B).

Assembly



TCT010432—UN—10FEB14

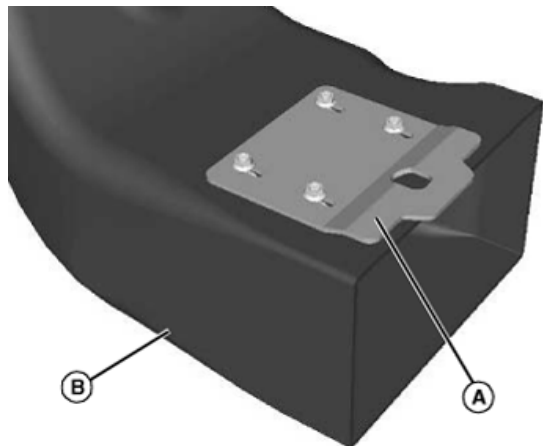
9. Attach bracket (N) to blower housing using two M8 locknuts (O) and two M8x20 carriage bolts (P).



TCT010443—UN—10FEB14

10. Position front pivot bracket (Q) flush with deck.
11. Install and tighten three M8x25 carriage bolts and locknuts in locations listed below:
 - 60 in. deck is located front of slot (R).
 - 72 in. deck is location (S).

Assemble Lower Chute



TCAL45151—UN—10APR13

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

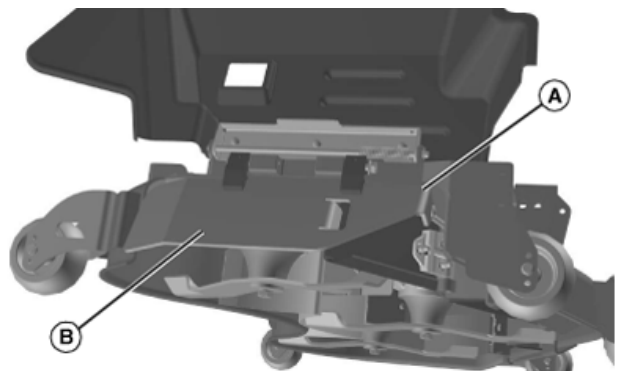
Install New Gate (Mulch on Demand Mower Decks Only)

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

CAUTION: 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.

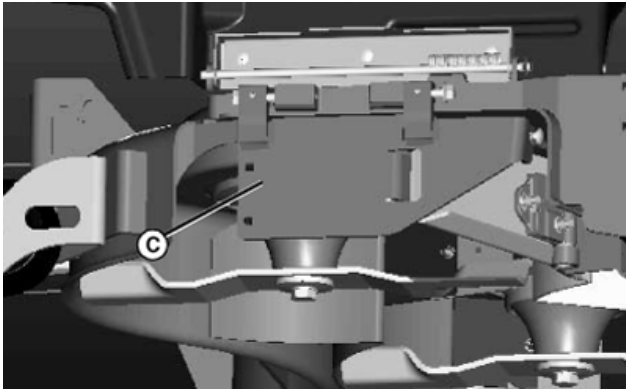
2. Lift discharge chute up.



TCAL45127—UN—10APR13

3. Remove link assembly (A).
4. Remove discharge gate (B).

Assembly



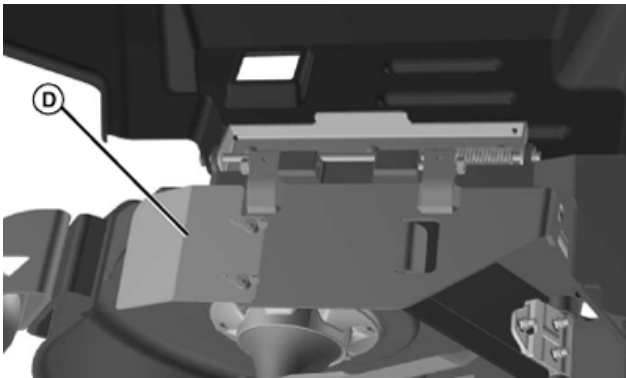
TCAL45128—UN—10APR13

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

NOTE: May need to remove gate before installing brackets. After installing gate adjust gate linkage in the "mulch" position until gate is completely closed.

Gate Extension for MCS Gate

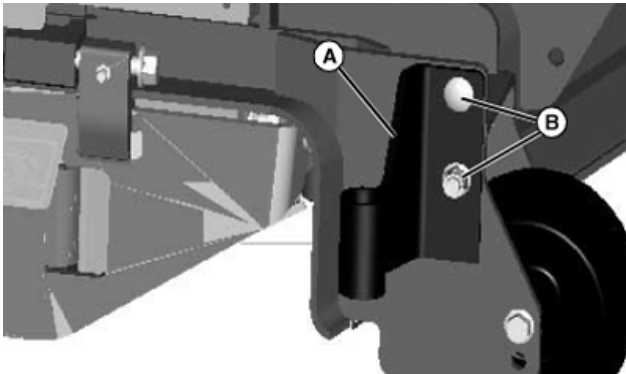
NOTE: Gate extension must be installed if machine is operated without MCS blower.



TCAL45129—UN—10APR13

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

Install Bracket Assembly for all Mulch on Demand Decks.

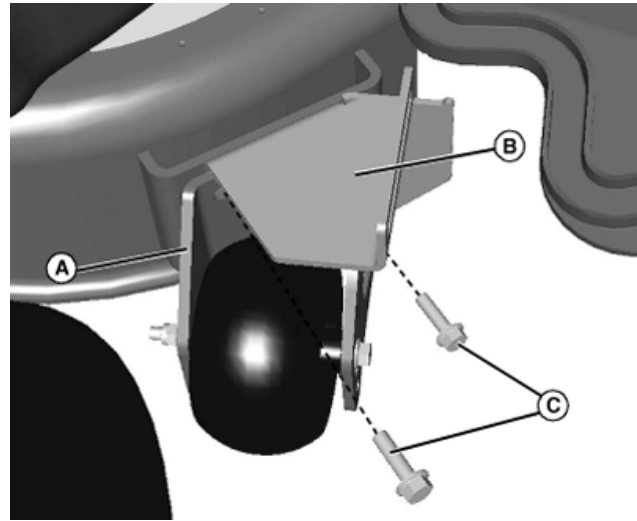


TCAL45125—UN—10APR13

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

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

Installing Rear Blower Bracket

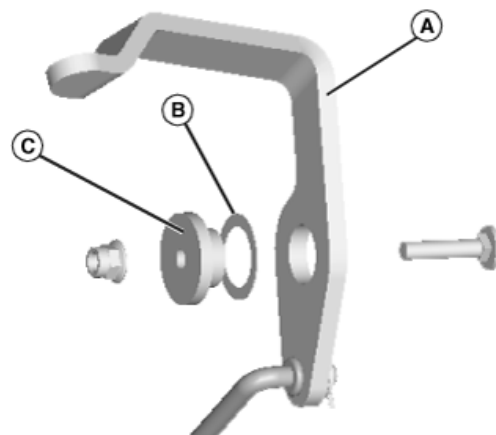


TCAL45126—UN—10APR13

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 M8x25 screws (C).

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

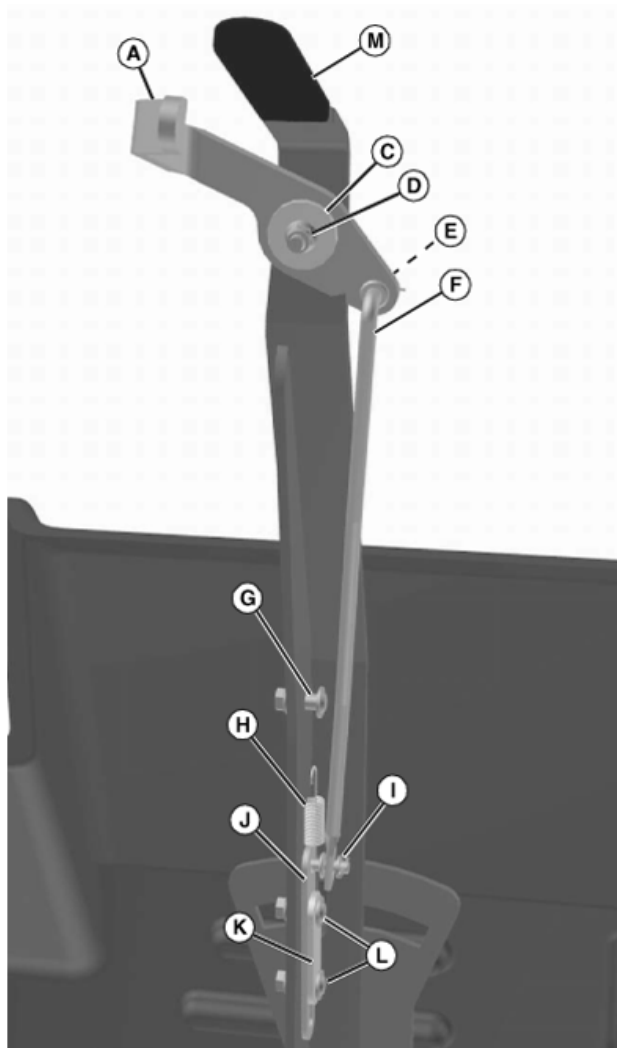
1. Park machine safely. (See Parking Safely in the SAFETY section.)



TCAL45130—UN—10APR13

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

Assembly

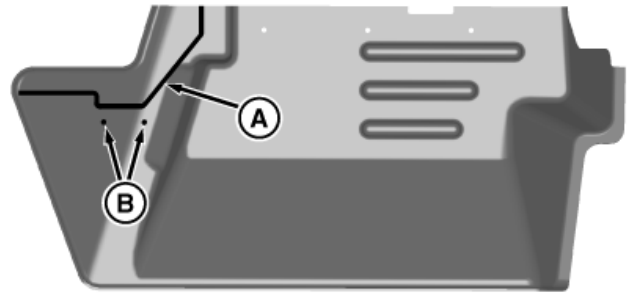


TCAL45131—UN—10APR13

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.

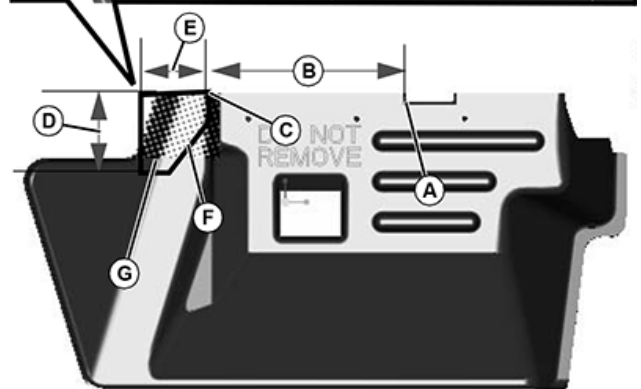
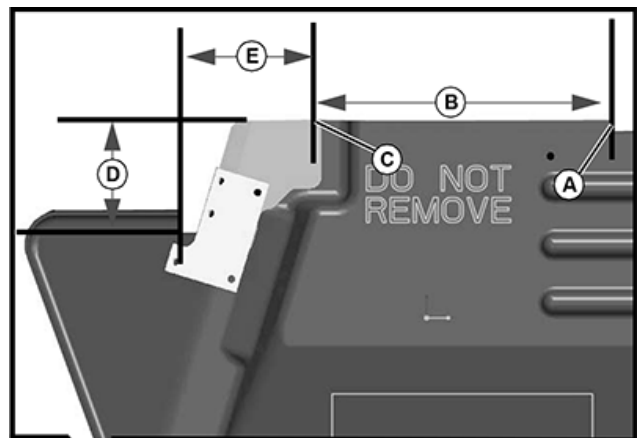
Trim Discharge Chute

60 in. MOD Deck



TCT012321—UN—12FEB15

1. Cut along scribe line (A) and drill at hole locations (B) if present. The following instructions are for discharge chutes without the scribe and drill lines.



TCAL45486—UN—08APR13

Top image shows parts installed for clarity only.

2. Begin at point (A) and measure distance (B) as shown. Scribe a mark (C).
3. Measure distance (D) beginning from hinge side of guard as shown. Scribe a mark.
4. Begin at point (C) and measure distance (E) as shown. Scribe a mark.
5. Using an appropriate tool, measure and mark a 45° angle line (F).
6. Extend remaining lines from marks so they meet at a 90° angle and identify the area (G) as shown.

Assembly

- Remove area (G) using a suitable cutting tool.

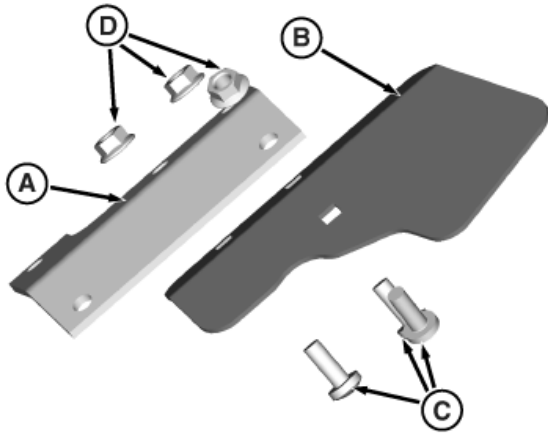
60SD and 72SD Decks

Distance (B)	270.00 ± 0.80 mm (10.62 ± 0.03 in.)
Distance (D)	100.00 ± 0.80 mm (3.93 ± 0.03 in.)
Distance (E)	110.00 ± 0.80 mm (4.33 ± 0.03 in.)

Install Patch on Discharge Cutout

IMPORTANT: Rubber hinge must be installed on top of metal plate to function properly.

Insert pan head screws on metal plate side and nuts on rubber hinge side. Tighten joint by turning screw while holding nut to prevent tearing rubber hinge.



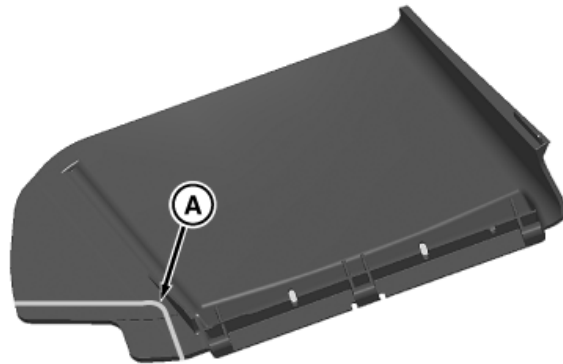
TCT012327—UN—16APR15

- Install rubber hinge (A) on top of metal plate (B) using three M6x16 pan head screws (C) and M6 flange nuts (D).



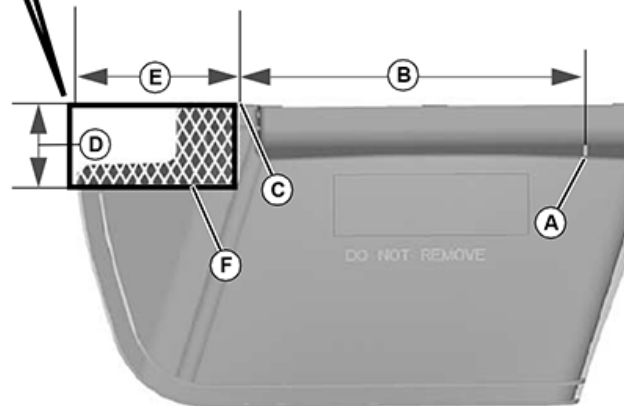
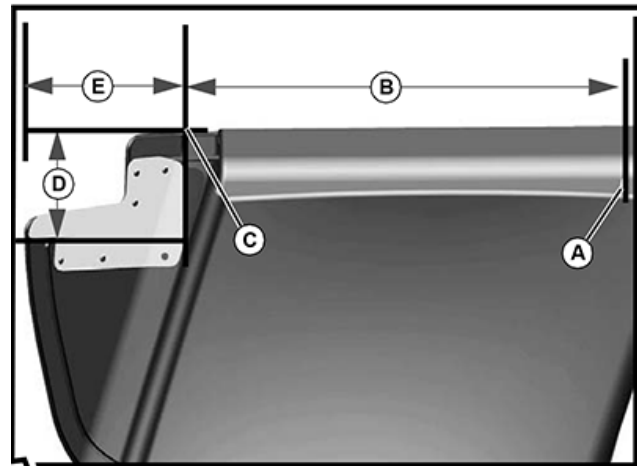
TCT012328—UN—16APR15

- Position the metal plate hinge assembly onto the chute, where the cutout is and drill two 6.35 mm (1/4 in.) holes (E) through the chute where the rubber hinge indicates.
- Bolt rubber hinge on top of chute with two M6x16 pan head screws and M6 flanged nuts.



TCT012322—UN—12FEB15

- Cut along scribe line (A) if present. The following instructions are for discharge chutes without the raised scribe lines.



TCAL45488—UN—08APR13

Top image shows parts installed for clarity only.

- Begin at point (A) and measure distance (B) as shown. Scribe a mark (C).
- Measure distance (D) beginning from hinge side of guard as shown. Scribe a mark.
- Begin at point (C) and measure distance (E) as shown. Scribe a mark.

Assembly

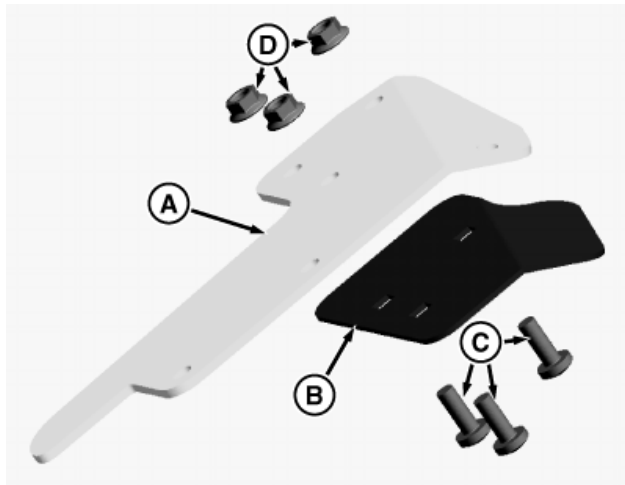
5. Extend lines from both marks so they meet at a 90° angle and identify the boxed area (F) as shown.
6. Remove boxed area (F) using a suitable cutting tool.

Distance (B) 423.00 ± 0.80 mm (16.65 ± 0.03 in.)
 Distance (D) 101.6 ± 0.80 mm (4.0 ± 0.03 in.)
 Distance (E) 200.00 ± 0.80 mm (7.87 ± 0.03 in.)

Install Patch on Discharge Cutout

IMPORTANT: Rubber hinge must be installed on top of metal plate to function properly.

Insert pan head screws on metal plate side and nuts on rubber hinge side. Tighten joint by turning screw while holding nut to prevent tearing rubber hinge.



TCT012319—UN—11FEB15

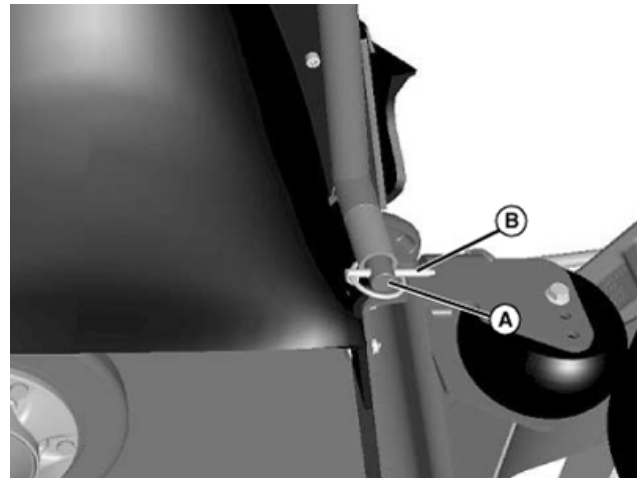
1. Install rubber hinge (A) on top of metal plate (B) using three M6x16 pan head screws (C) and M6 flange nuts (D), with the rubber hinge on top of the metal bracket.



TCT012318—UN—10FEB15

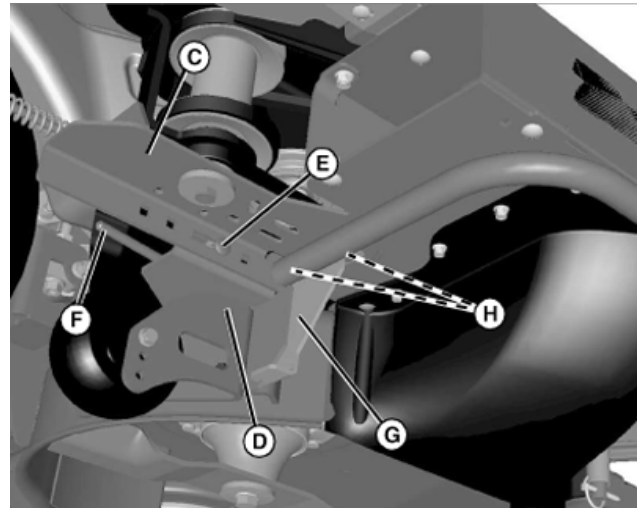
2. Position the metal plate hinge assembly onto the chute, where the cutout is and drill three 6.35 mm (1/4 in.) holes (A) through the chute where the rubber hinge indicates.
3. Bolt rubber hinge on top of chute with three M6x16 pan head screws and M6 flanged nuts.

Tighten Hardware and Adjust Belt



TCAL45136—UN—10APR13

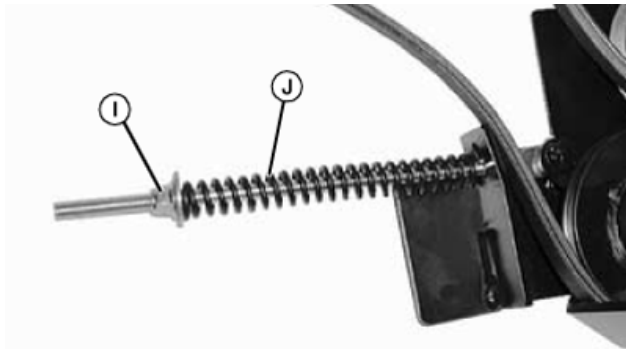
1. Install blower front pivot pin (A) and secure with quick-lock pin (B) in front mounting bracket.



TCAL45137—UN—10APR13

2. Swing blower into position and align hole in blower bracket (C) with hole in blower support bracket (D). Install carriage bolt (E) and handle assembly (F).
3. Install bracket (G) using two carriage bolts and nuts (H).
4. Tighten hardware on rear mounting brackets.
5. Connect primary drive belt from blower to drive sheave on deck.

Assembly



TCAL45138—UN—10APR13

6. Adjust primary belt.
7. Tighten nut (I) on tension rod until spring (J) length is within specification.

Specification

Tension Rod Spring — Length 150 mm +/- 10 mm (6 in. +/- 0.4 in.)

Hopper Parts List

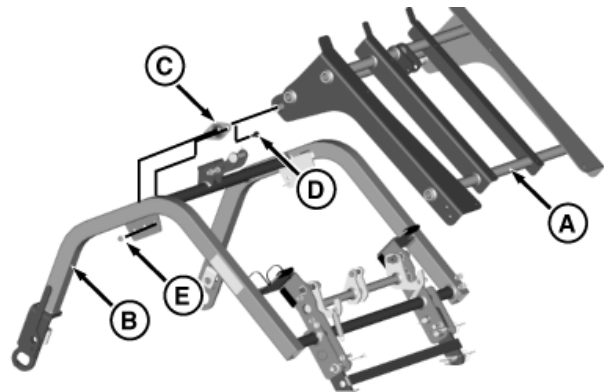
Qty.	Description
4	Bearing
1	Bracket, Weight
1	Pin, Retainer, Weight Bracket
1	J Bolt, MCS Chute
1	Hose-990 mm
1	Clamp, Hose
1	Plate, Inlet Support
1	Chute, Lower MCS
1	Actuator, Linear
1	Tie Strap (Self Locking
2	Tie Strap
1	Plate, Harness Bracket
1	Clamp, Coated
1	Latch, MCS Frame Weldment
1	Weldment, Dump Frame
1	Frame, Dump, Assembly With Labels
1	Adaptor, Hose
1	Hopper, Assembly
1	Bracket, Crossmember
2	Plate, ROPS Latch
4	Bumper, Edge
1	Plate, Inlet Support
1	Tub-Door, Hopper With Labels
4	Plate, Hopper Base Support
1	Wiring Harness, MCS
2	Plate, Hook
1	Chute, MCS Inlet
21	Bolt, Carriage, M8x25
38	Locknut, M8
4	Bolt, Carriage M8x35
2	Pin, Cylinder
3	Pin, Cotter
8	Washer, 24 mm OD

Qty.	Description
1	Washer, 25 mm OD
2	Washer, Nylon
9	Bolt, Carriage, M8x35
2	Washer, 44.5 mm OD
7	Pin, Drilled
4	Pin, Spring Locking
1	Knob, Locking
2	Bolt, Carriage M12x30
2	Locknut, M12
1	Pin, Cotter M4x32
2	Pin, Cotter M5x32
2	Washer, 30 mm OD
4	Washer, 18 mm OD
1	Pin, M10x60
1	Eyebolt, M8
2	U-Bolt
4	Nut, 9.5 mm (.375 in.)
4	Nut, M16
1	Screw, M5x10
2	Bolt, M16x80

Prepare Hopper For Installation

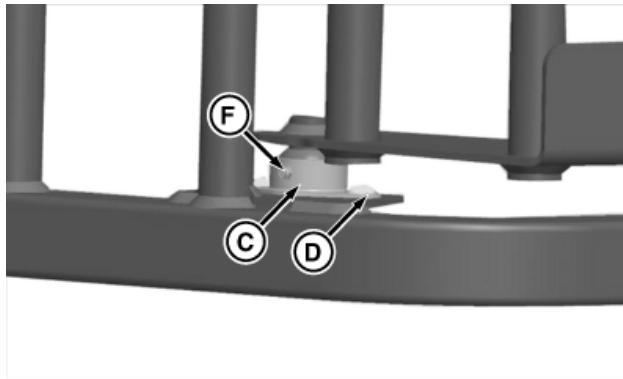
CAUTION: Fingers and hands can be pinched or crushed. Be aware of potential pinch points and keep hands away. Machine component is heavy. Use a safe lifting device or get an assistant to help lift and hold component into place for installation.

IMPORTANT: Damage may occur to hood during frame installation if frame contacts hood.



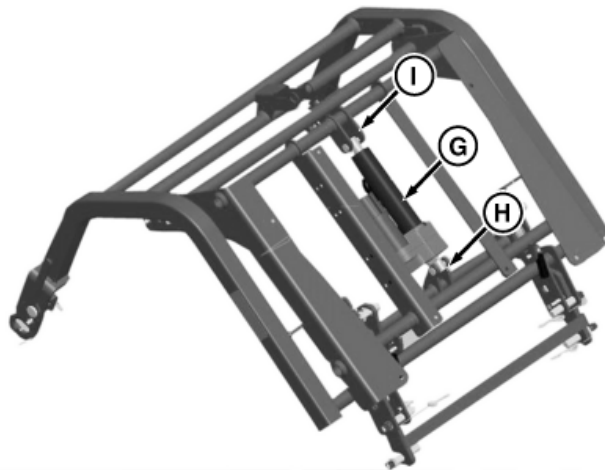
TCT010765—UN—25FEB14

Assembly



TCT010438—UN—25FEB14

1. Slide Bearings (C) on to each side of tilt frame (A) with the flange on the outside, making sure grease fitting (F) is pointing up..
2. Position the tilt frame (A) onto the main frame (B) as it would be in the closed position and align bearing (C) as shown and attach with two M8x25 carriage bolts (D) and M8 locknut (E) per side.

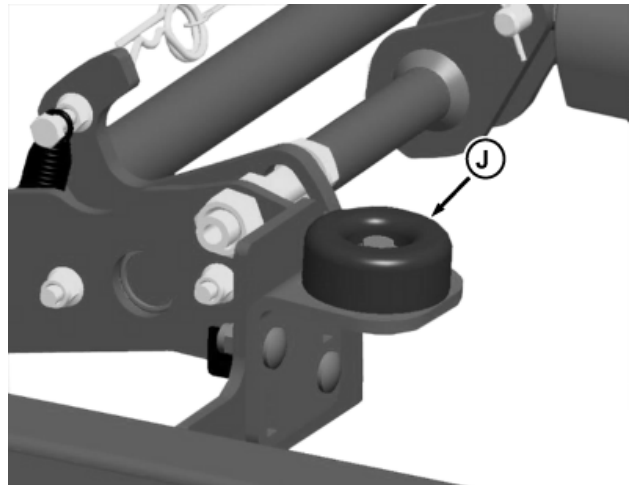


TCT010766—UN—25FEB14

3. Attach cylinder (G) to main frame (H) and tilt frame (I) using 12.7 mm drilled pins and cotter pins.

IMPORTANT: Face the motor portion of the cylinder towards machine Right

NOTE: Can twist the rod end to extend the actuator to get it to pin in.
Use switch to latch tilt frame to main frame.

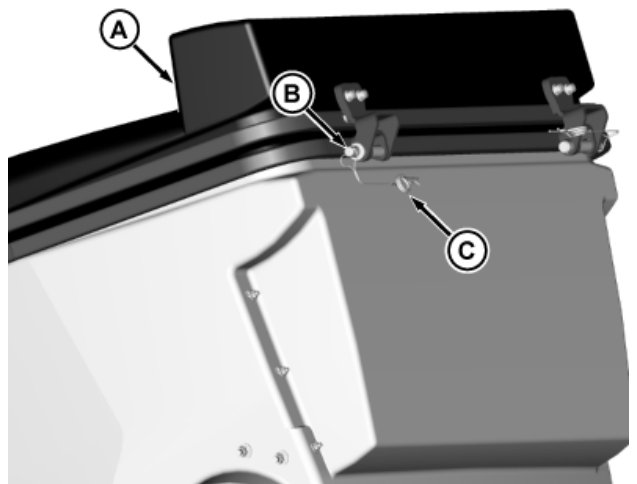


TCT010457—UN—12AUG14

4. Install bumpers on brackets using an M8x30 bolt (J) and M8 washer on top and an M8 nut on bottom. Tighten until bumper starts to compress. Do not over tighten

IMPORTANT: Do Not Use Slots. (Those are back up) Both sides.

Install Hopper Assembly Onto Hopper Frame



TCT010444—UN—19AUG14

1. Remove hopper door (A) and drilled pins (B) with retaining clips (C).

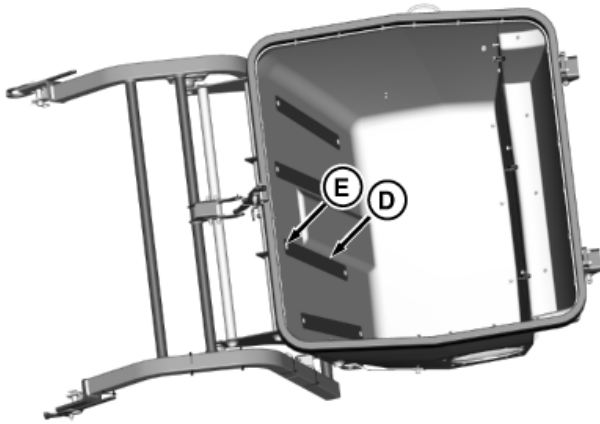
NOTE: Retain hardware for installation.

2. Unlock latch.

NOTE: All carriage bolts in hopper will have the head of the bolt inside and nut on the outside.

Assembly

CAUTION: Do Not over tighten. Over tightening can cause the plastic to crack. Should only be tight enough that it holds the hopper securely to the frame.



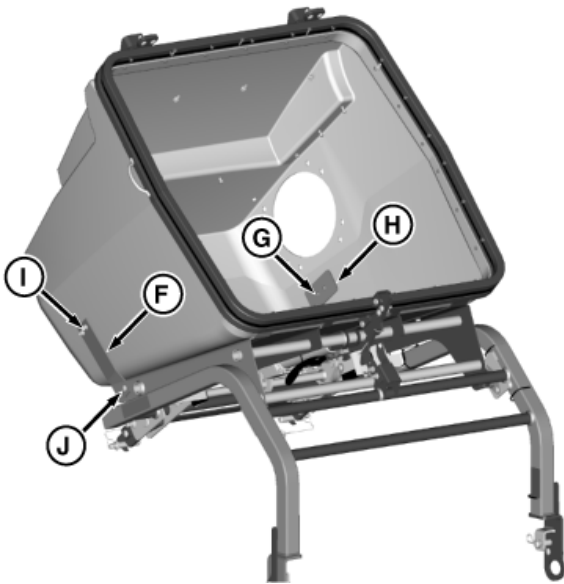
TCT010767—UN—26FEB14

View from top

- Place hopper assembly on frame. Secure hopper with four plates (D) using two M8x25 carriage bolts (E) and M8 locknuts per plate. Install all hardware before tightening.

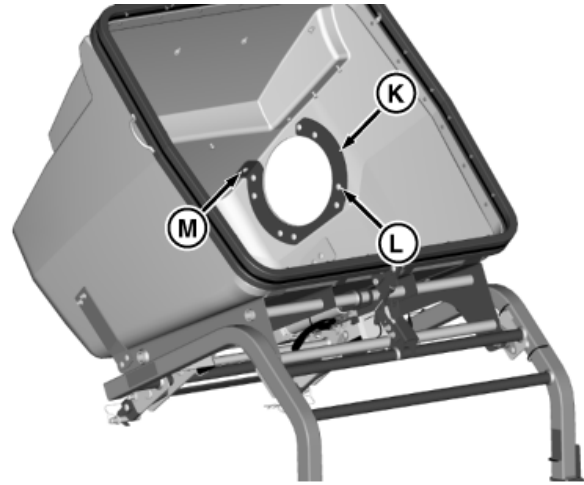
CAUTION: Machine component is heavy. Use a safe lifting device or get an assistant to help lift and hold component into place for installation.

CAUTION: Do Not over tighten. Over tightening can cause the plastic to crack. Should only be tight enough that it holds the hopper securely to the frame.



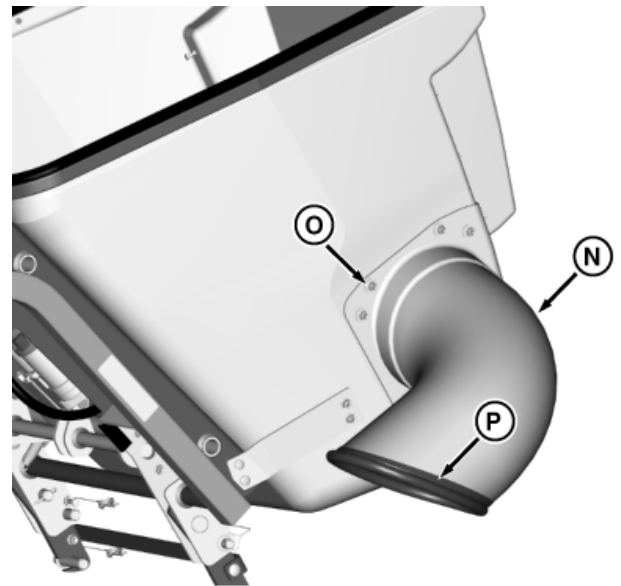
TCT010450—UN—25FEB14

- Attach bracket (F) to hopper. Install two M8x25 carriage bolts (G) through the support plate (H), hopper, and bracket.
- Attach two M8 locknuts (I).
- Install two M8x25 carriage bolts (J) through frame and secure with two M8 locknuts.



TCT010435—UN—25FEB14

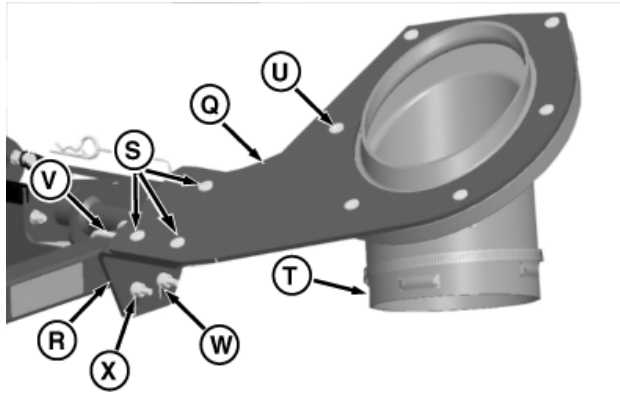
- Install the inner ring (K) to hopper with eight M8x35 carriage bolts (L) and one M6x25 carriage bolt (M), M6 washer and M6 nut.



TCT010436—UN—27FEB14

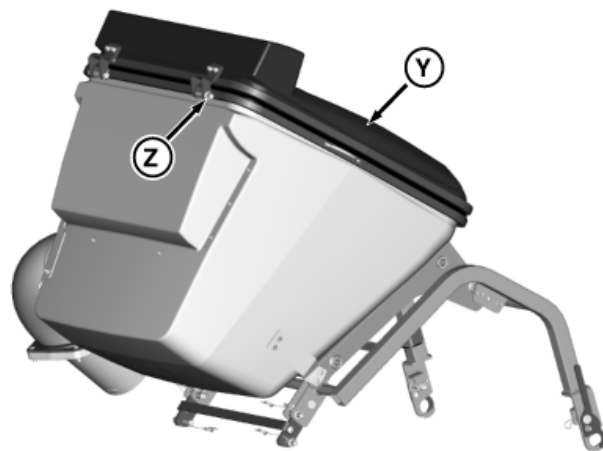
- Secure upper chute (N) to hopper using eight M8 locknuts (O). Tighten all hardware.
- Install rubber bulb seal (P) starting at the bottom making sure clip is fully engaged all the way around.

Installing



TCT010143—UN—27FEB14

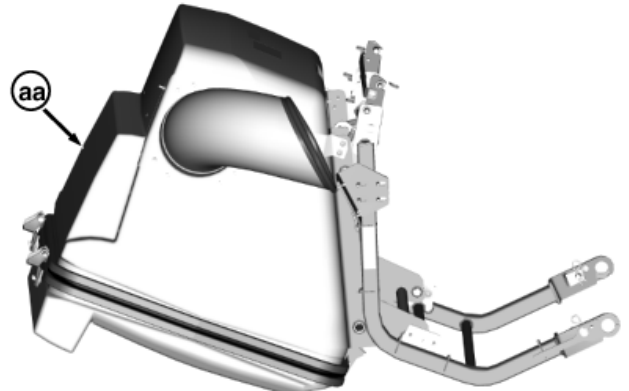
10. Install hose bracket (Q) on top of support bracket (R) using three M8x25 carriage bolts (S) and three M8 locknuts.
11. Install tube (T) using six M8x45 carriage bolts (U) and six M8 locknuts.
12. Install support bracket (R) to main frame on right side of machine between bumper stop and crossbar using two u-bolts (V), four 10 mm I.D. washers (W) and four 9.5 mm (.375 in.) nuts (X)



TCT010451—UN—27FEB14

13. Install door (Y) with two drilled pins (Z) and two cotter pins.

CAUTION: Machine component is heavy. Use a safe lifting device or get an assistant to help lift and hold component into place for installation.

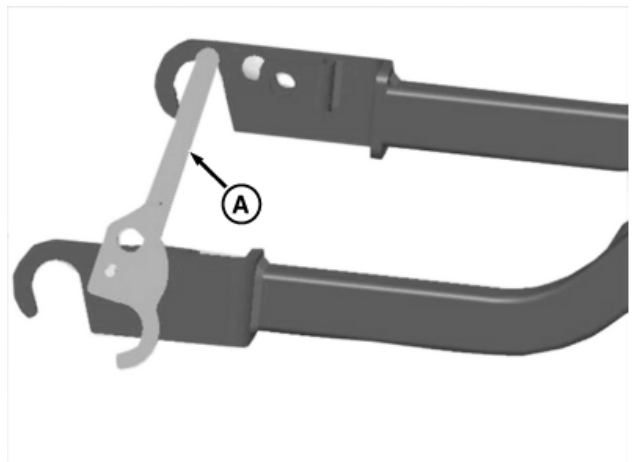


TCT010452—UN—27FEB14

14. Flip assembly (aa) over to prepare for installation on machine.

Installing

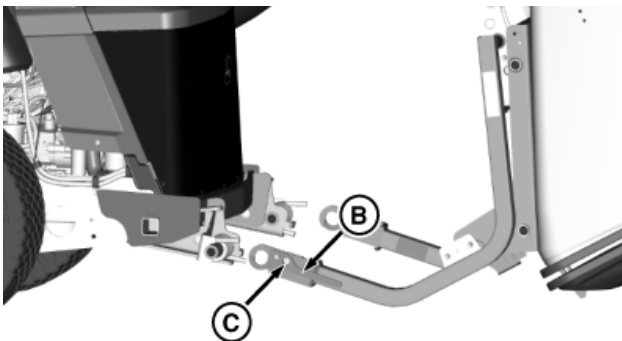
Install Assembly Onto Machine



TCT010454—UN—13FEB14

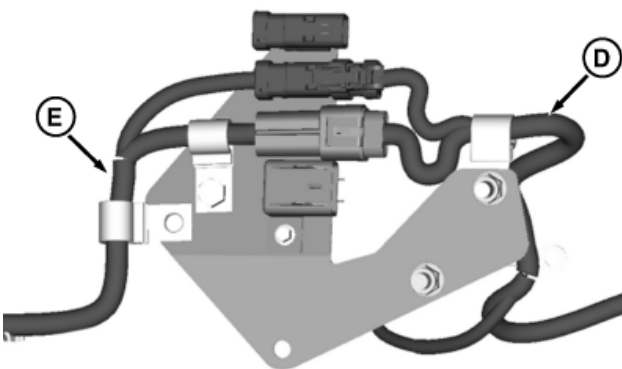
1. Pull pins and rotate locking feature (A) up.
2. Bring the machine as close to the hopper as possible.

Installing



TCT010440—UN—26FEB14

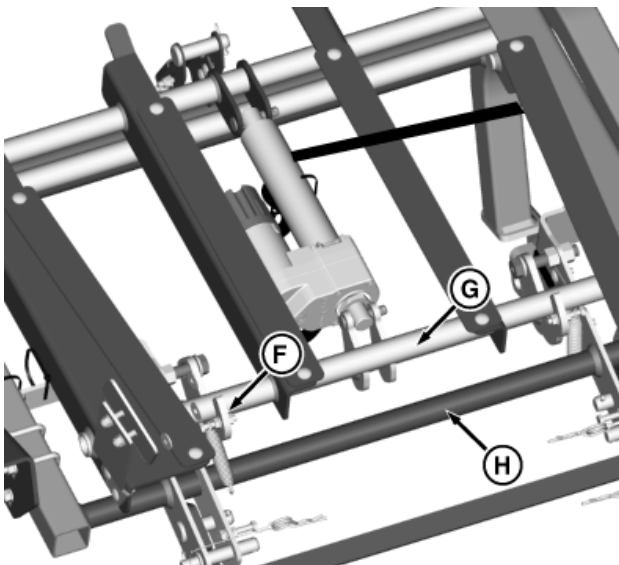
3. Push down on the hopper assembly then close both lower locking features (B). Do not install pins (C) at this time.



TCT010768—UN—26FEB14

4. Plug in MCS side connectors (E) to machine side connectors (D).

CAUTION: Machine component is heavy. Use a safe lifting device or get an assistant to help lift and hold component into place for installation.

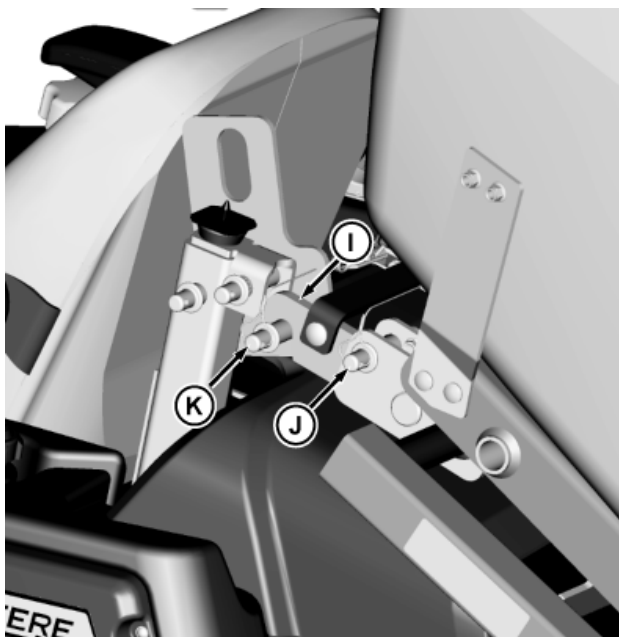


TCT010449—UN—27FEB14

Shown With Hopper Removed

5. Have 1 person lift up on the hopper while someone activates the switch to latch (F) the tilt frame (G) to the main frame (H) until a ratcheting sound is heard.

CAUTION: Machine component is heavy. Use a safe lifting device or get an assistant to help lift and hold component into place for installation.



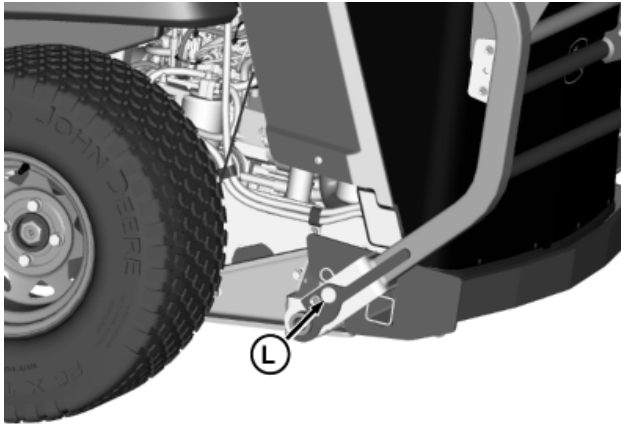
TCT010441—UN—13AUG14

Some Parts Removed for Ease of Viewing

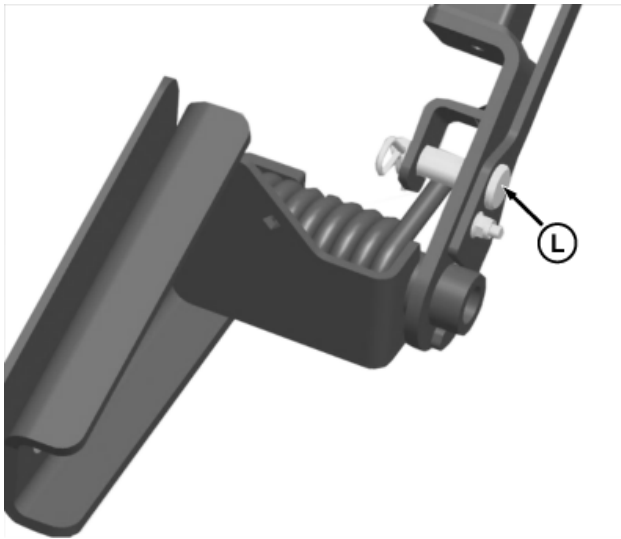
6. Remove pin (J), lift hopper (I) into place. Latch onto ROPS pin (K). Insert pin (J) back into place.

IMPORTANT: You may have to use a tool to force pin (L) over the spring or a hammer to force it over and through both the holes. It's important that it goes over the spring to provide support.

Installing

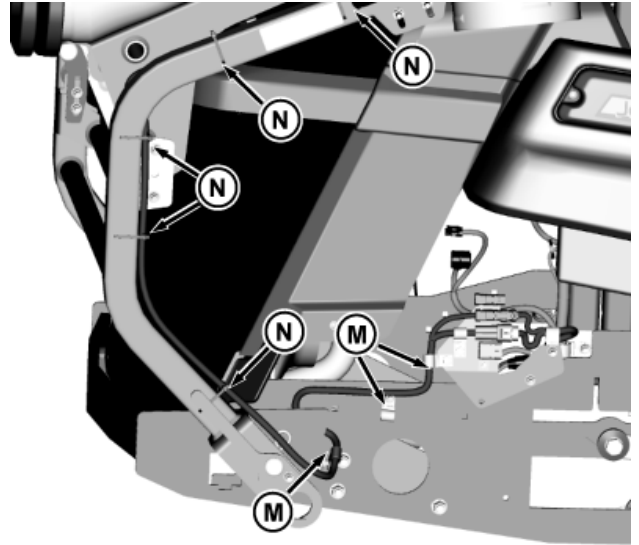


TCT010769—UN—27FEB14



TCT010772—UN—19MAR14

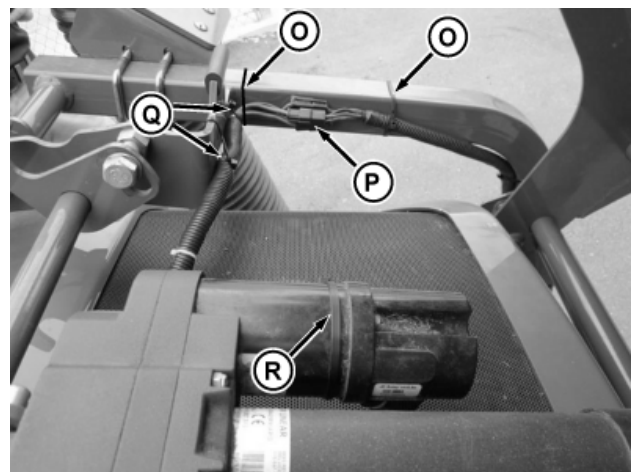
7. Install pin with clip (L) into locking feature on top of spring as shown.



TCT010453—UN—25AUG14

8. Route wiring harness up frame (as shown) securing with three clamps (M) and four tie straps (N).

IMPORTANT: Do not cover warning labels with tie straps.



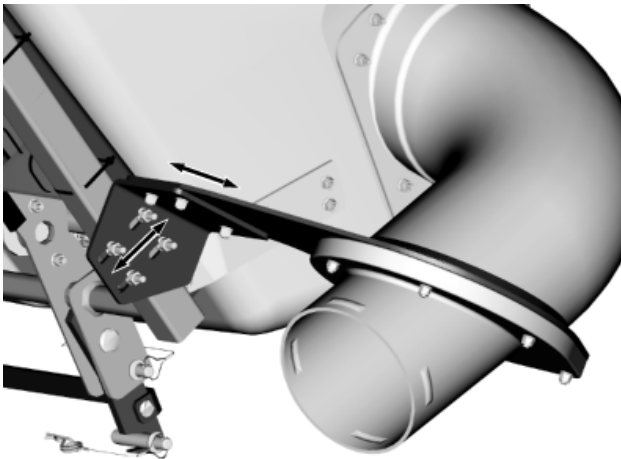
TCT010455—UN—25AUG14

9. Route wiring harness along top of frame securing with tie straps (O).

IMPORTANT: Do not cover warning labels with tie straps.

10. Plug in connectors (P).
11. Secure actuator wiring harness to frame with two tie straps (Q) on either side of bumper.
12. Install tie strap (R) securing wiring harness to actuator.

Installing

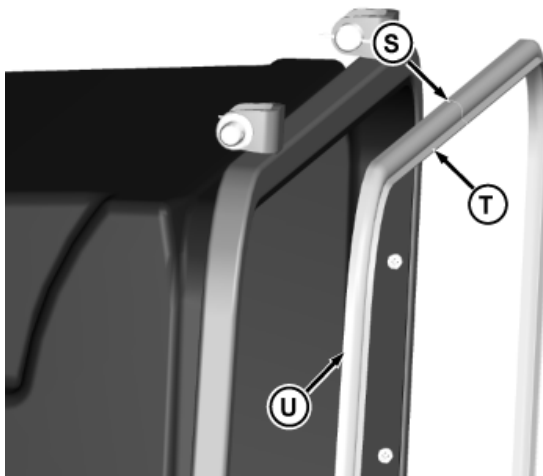


TCT010461—UN—03JUN14

13. Adjust bracket to center and partially compress the bulb seal when the hopper is fully latched. (See Hopper Elbow in the ADJUSTMENTS section.)



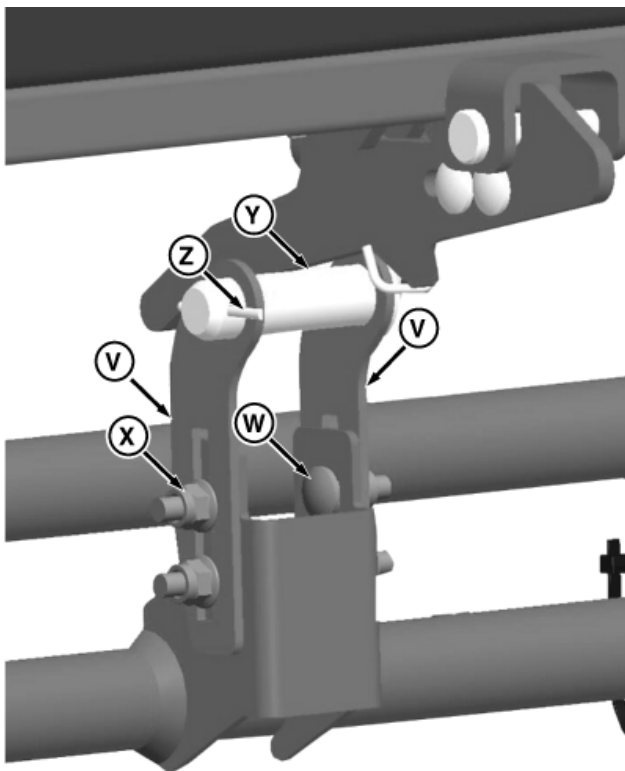
TCT010456—UN—27FEB14



TCT011395—UN—12AUG14

Shown With Door Removed

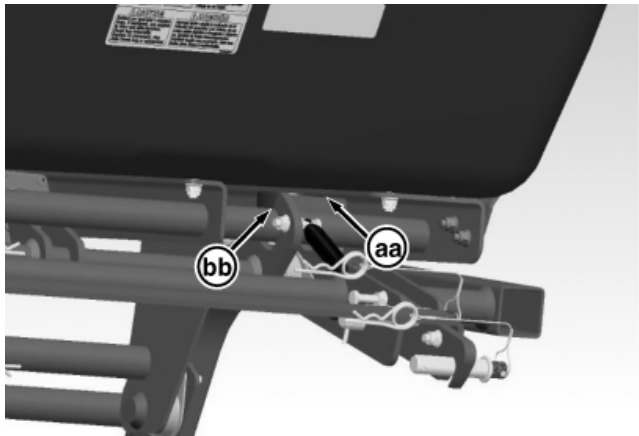
14. Dump the hopper (open) and install the door seal (U) onto hopper frame as shown. Start at the center of top (S) and peel the cover off the adhesive backing. Make sure the lip of the seal (T) is angled towards the center of the hopper as shown. Seal should be centered on the hopper frame.



TCT010459—UN—27FEB14

15. Install door latch:
- Install the latch pin brackets (V) centered in slots. Secure with two carriage bolts (W) and two locknuts (X).
 - Once both plates are installed but loose, install the pin (Y) and cotter pin (Z).
 - Adjust door latch. (See Hopper Door in the ADJUSTMENT section.)

Installing



TCT010458—UN—27FEB14

16. Check over installation:

- Grease four zerk locations before use (See Service section).
- Close the hopper all the way (until cylinder makes sound and latches grab tilt frame).
- If there is no gap, at (aa) and the tilt frame contacts the main frame, then assemble bumper brackets in slots to allow for adjustment and compression of the bumpers when closed.
- There should be no gap between the latch and cross bar (bb) of the tilt frame
- Confirm door latch works.

Installing Blower

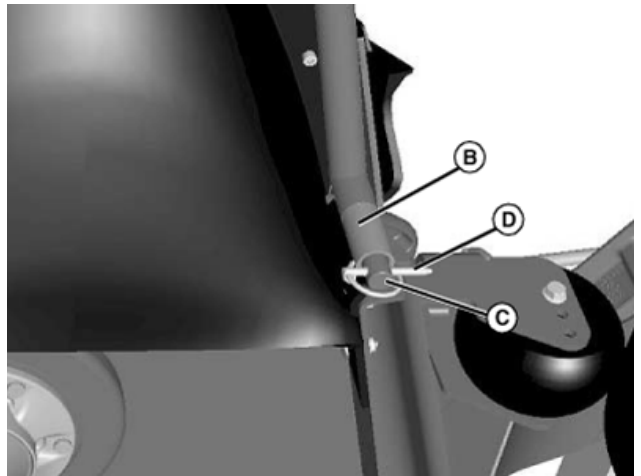
CAUTION: Machine component or attachment is heavy. Use a safe lifting device or get an assistant to help lift, install or remove component or attachment.

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



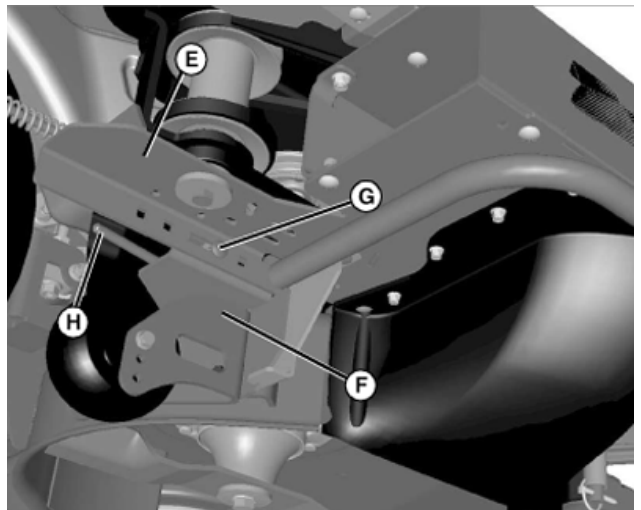
TCAL45154—UN—10APR13

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



TCAL45155—UN—10APR13

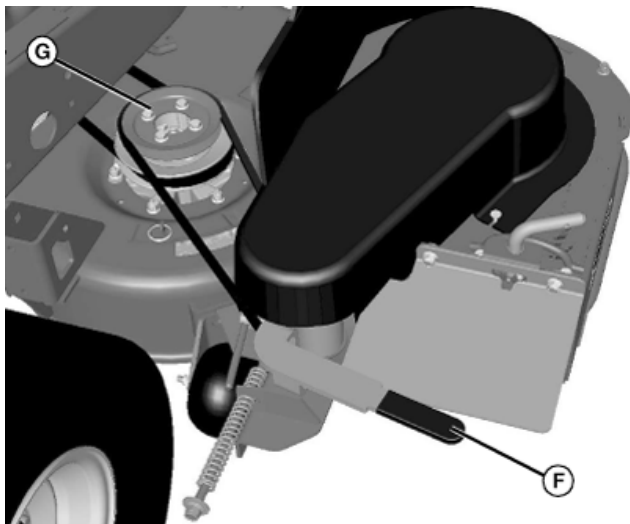
2. Insert front pivot pin (C) of blower into front bracket mounting bracket (B). Install quick-lock pin (D) into front pivot pin.



TCAL45156—UN—10APR13

3. Swing blower into position and align hole blower bracket (E) with hole in blower support bracket (F). Install carriage bolt (G) and handle assembly (H).

Installing

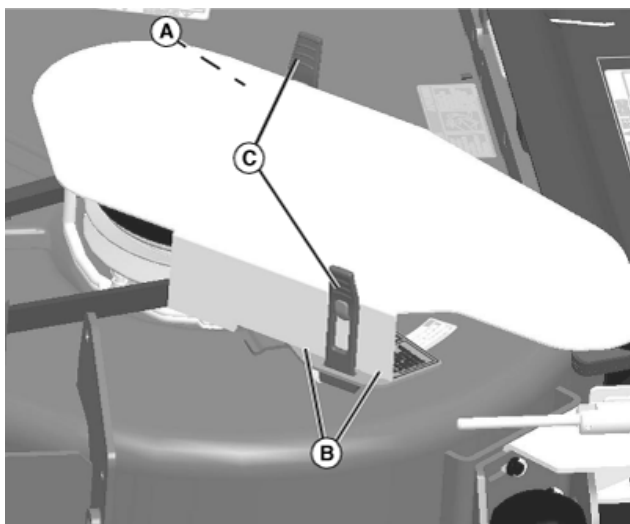


TCAL45157—UN—10APR13
Parts have been removed to show a clear illustration.

4. Use tension lever (F) to allow belt to slip over sheave (G).
5. Install new blower belt shield for your corresponding deck size.

Installing Sheave Cover

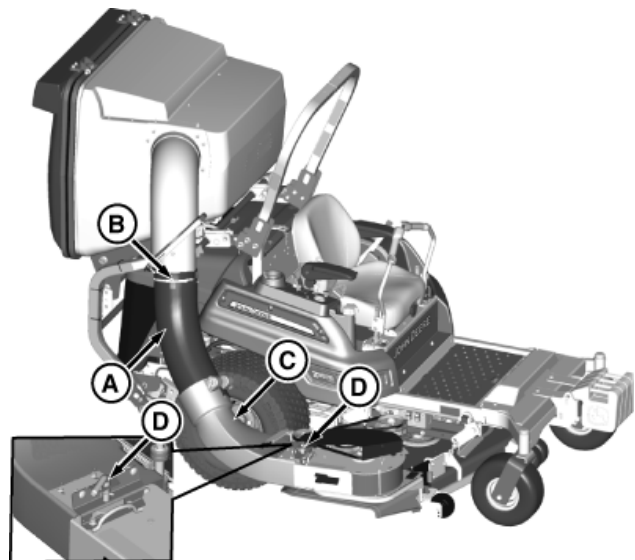
1. Park machine safely. (See Parking Safely in the SAFETY section.)



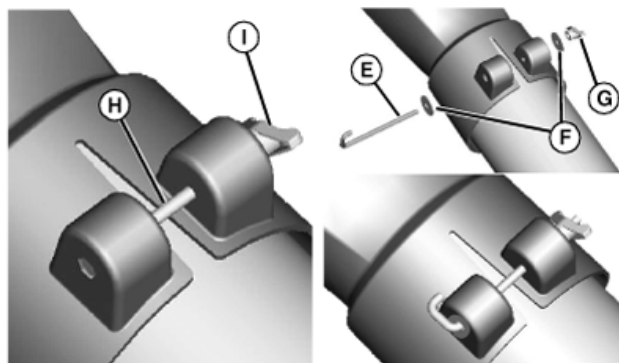
TCAL45158—UN—10APR13

2. Position front belt cover tab (A) into slot first, and then lower two rear tabs (B) into slots, as shown.
3. Secure with two bungee straps (C) from previously installed brackets.

Installing Chute



TCT010433—UN—07FEB14



TCAL45160—UN—10APR13
Hex head bolt used in previous production models, J-bolt used in current production models.

1. Connect tube (A) to upper chute with hose clamp (B).
 2. Connect lower end of tube (A) to lower chute (C).
 3. Secure hose to lower chute:
 - Secure tube 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).
 4. Lift and hold open exhaust flap on blower.
 5. Slide lower chute (C) completely onto blower outlet making certain pin (D) is fully lowered, securing lower chute onto blower.
- IMPORTANT: Do not over tighten knobs. Only tighten to secure hose assembly in place.**
6. Tighten knobs on upper and lower chutes to hold hose assembly in place.

Removing and Storing

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.

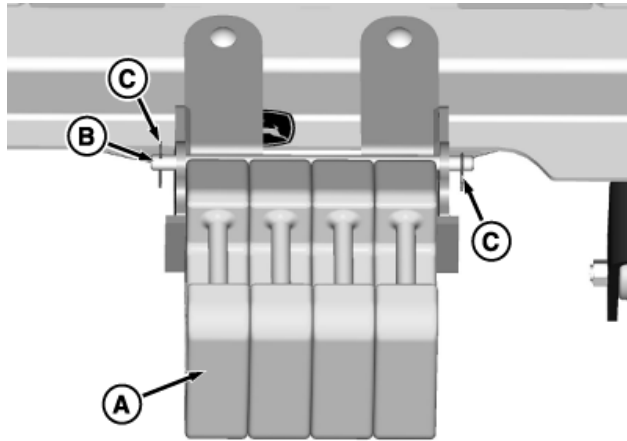
Installing Ballast

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.



TCT009688—UN—06JAN14

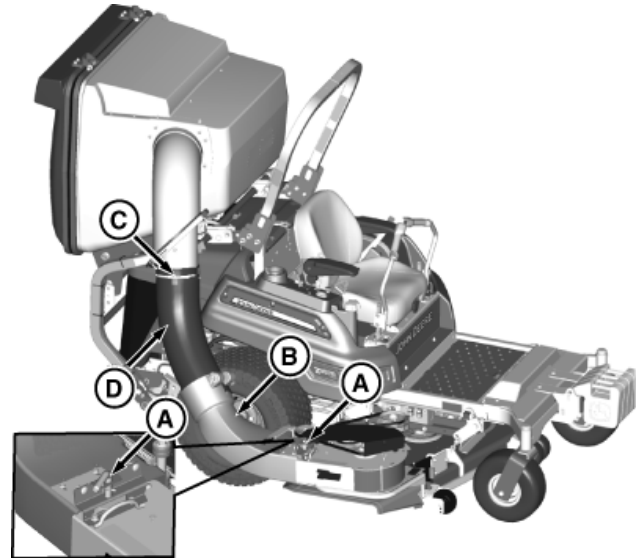
1. Add John Deere 19 kg (42 lb.) suitcase weights (A).
 - 3 weights used with 72-inch deck.
 - 4 weights used with 60-inch deck and 60-inch MOD decks..
2. Install locking bar (B) and secure with spring locking pins (C).
3. Place cover over weights.

Checking Tire Pressure

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

Removing and Storing

Removing Hopper Chute

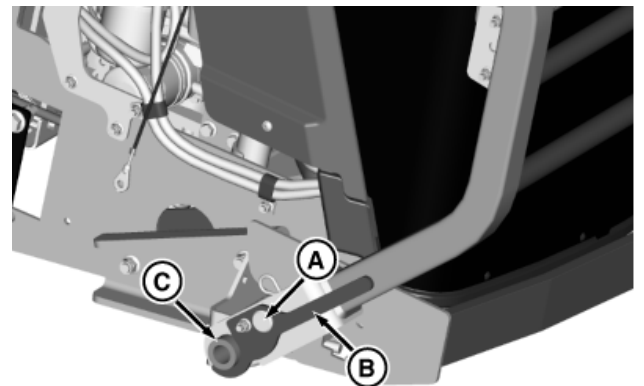


TCT010442—UN—07FEB14

1. Pull upward on pin (A), then remove lower chute (B) from blower outlet.
2. Remove J-bolt, washers and knob to remove lower chute from tube (D).
3. Loosen hose clamp (C) then remove tube (D) from upper chute.

Removing Hopper Assembly

1. Remove upper and lower chute.



TCT010445—UN—26FEB14

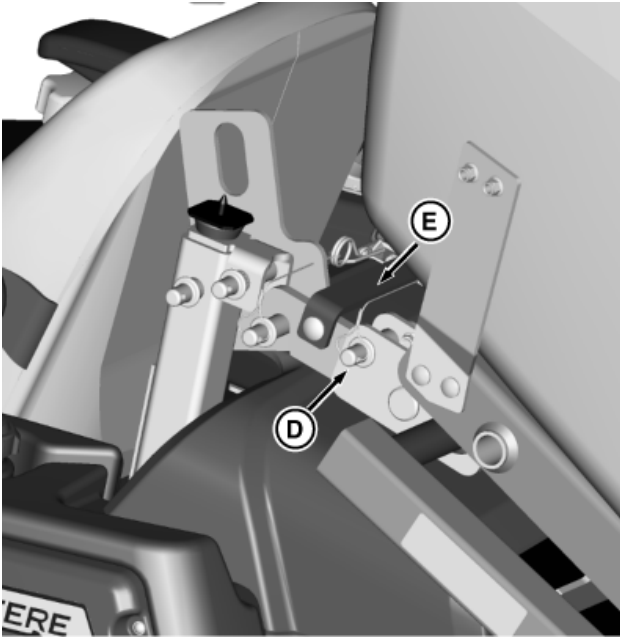
2. Remove clip and pin (A).
3. Tilt hopper.

IMPORTANT: Damage may occur to hood during hood installation if frame contacts hood.

CAUTION: This is heavier than normal because you're removing the spring assistance by removing the pin.

Removing and Storing

4. Pull latch handle (B) to release hopper from lower mounting pins (C).



TCT010770—UN—17MAR14
Some Parts Removed for Ease of Viewing

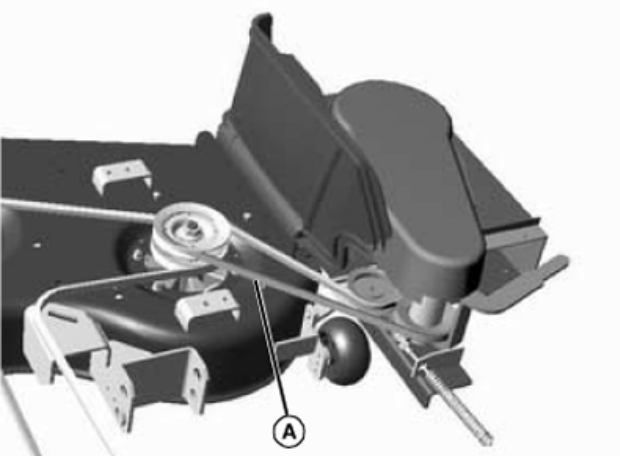
5. Remove drilled pins (D) from hopper.
6. Using the handle on the door of the hopper, pull back towards the machine, then pull up on the latch (E) while using the handle to control the hopper as it lowers to the ground.

CAUTION: Do not store Hopper attachment on door to prevent door seal pre-set. Turn hopper on its side.

Removing Blower

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



TCAL45164—UN—10APR13
Drive belt shield not shown.

1. Remove drive belt shield and drive belt (A) from top sheave.
2. Remove front and rear lock pins.

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

3. Swing rear end of blower out and lift pivot pin from bracket.
4. Install MCS deck belt shield.

Removing Ballast

CAUTION: 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: Do not 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. Do not store Hopper attachment on door to prevent door seal pre-set. Turn hopper on its side.
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: Abrasive surfaces can damage attachment. Store attachment on non-abrasive surface or on wooden blocks.

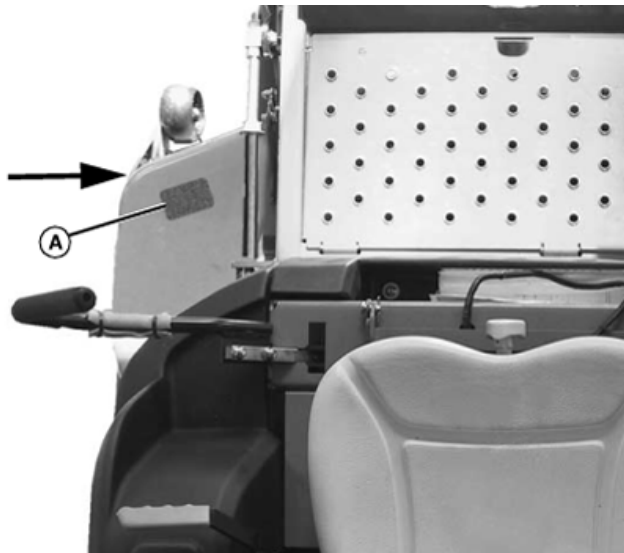
10. If storing attachment outdoors, block up attachment if possible and place a waterproof cover over it.

Operating

Operating

Mounting and Dismounting Machine With MCS Installed

CAUTION: Stepping over front ballast weights can cause you to fall. Mount and dismount from the side of machine by stepping on the grip tape installed on mower deck.



TCAL45165—UN—10APR13

Mount and dismount machine from the side by stepping on grip tape (A) of mower deck. Park machine safely (See Parking Safely in the SAFETY section.) before dismounting.

Using the Blower

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

Raising and Lowering the Hopper

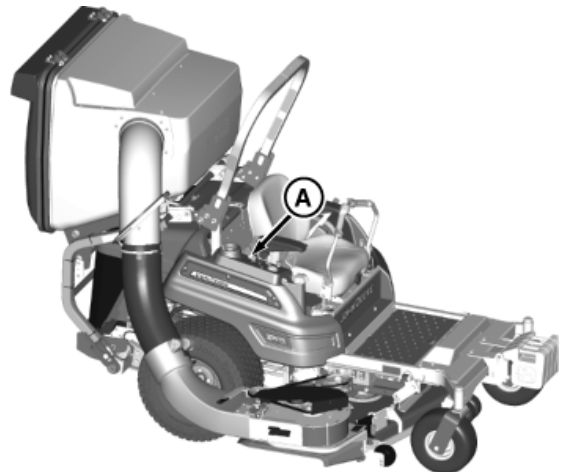
1. When hopper is full, disengage PTO.

CAUTION: 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 switch to the neutral lock position.
4. Lock park brake.

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



TCT010447—UN—10FEB14

5. Activate Switch (A) to fully open position.
6. Unlock park brake.
7. Drive forward until hopper door is clear of pile of grass clippings.
8. Close hopper door by activating switch down until the hopper latches and a ratcheting sound is heard.

Service Intervals

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.
- When closing hopper, hold switch down until the hopper cylinder lowers completely and a ratcheting sound is heard. This will ensure the latches have engaged completely to hold the hopper securely

Service Intervals

Servicing Your Attachment

Please use the following timetables to perform routine maintenance on this attachment.

Daily - As Needed

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

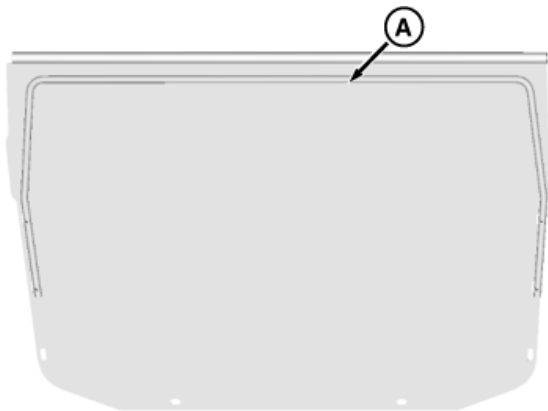
Every 50 Hours

- Check belt tensions.
- Check idler and jacksheave bearings.
- Inspect housing for wear.
- Grease control shaft bushings.
- Grease latch grease points.
- Grease tilt frame grease points.
- Check hose for wear and deterioration. Replace if necessary.
- Check elbow seal, door seal, and screen seal. Replace if necessary.

Service

Cleaning Hopper Exhaust Screen

1. Park machine safely. (See Parking Safely in the SAFETY section.)
2. Activate the hopper(to partially dumped) to gain access to the screen.

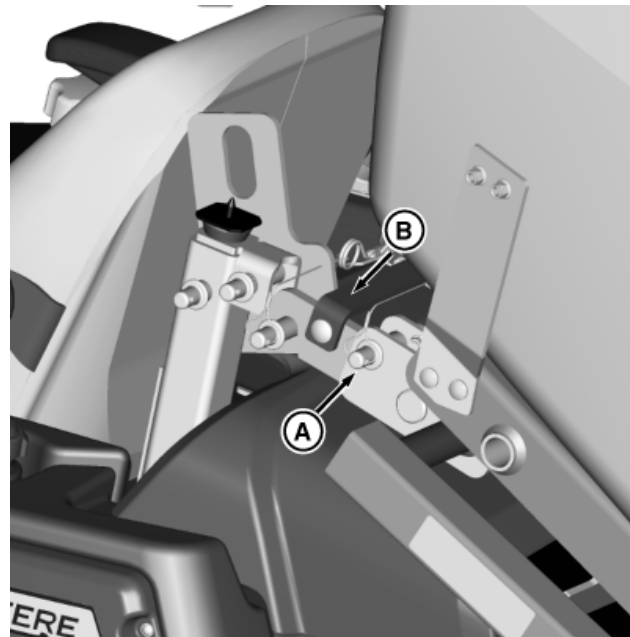


TCT010437—UN—07FEB14

3. Clean the exhaust screen (A) with a brush or water from the outside of hopper.

Tilt for Service

IMPORTANT: Do not leave machine running when tilted for service.



TCT010446—UN—17MAR14

Some Parts Removed for Ease of Viewing

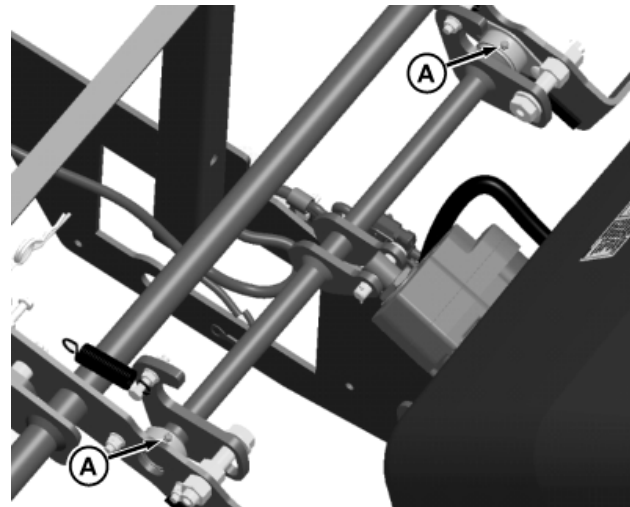
1. Remove drilled pins (A) from hopper.



CAUTION: Hopper is heavy and may require assistance to lift.

2. Using the handle on the door of the hopper, pull back towards the machine, then pull up on the latch (B) while using the handle to control the hopper as it lowers to the ground.

Grease Locations

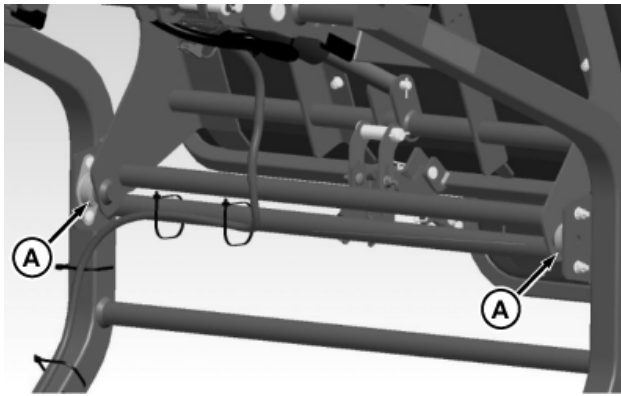


TCT011373—UN—02JUN14

A — Grease Points

1. Grease latch grease points (A).

Service



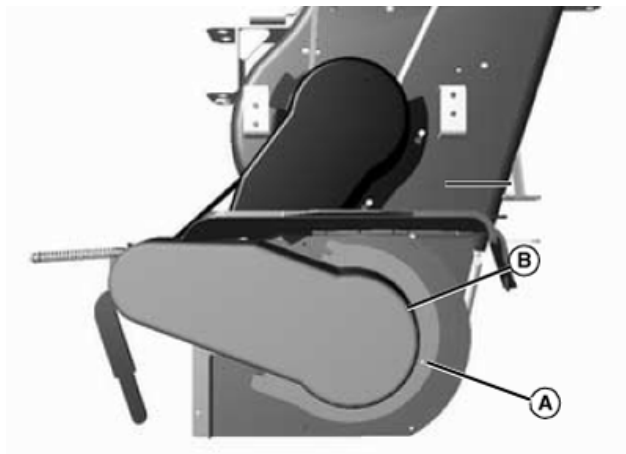
TCT011374—UN—02JUN14

A — Grease Points

- Grease tilt frame grease points (A).

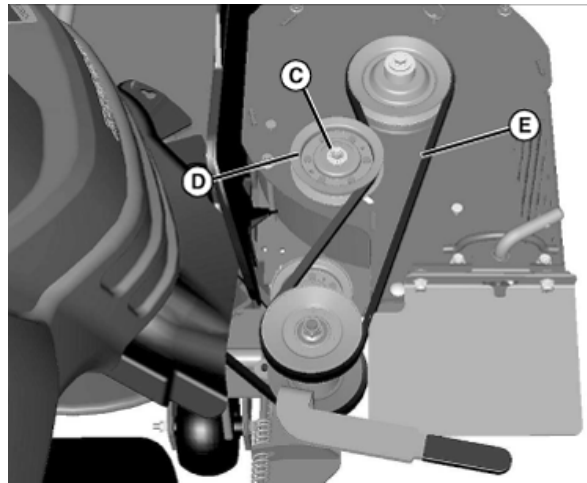
Removing Drive Belts

CAUTION: 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.



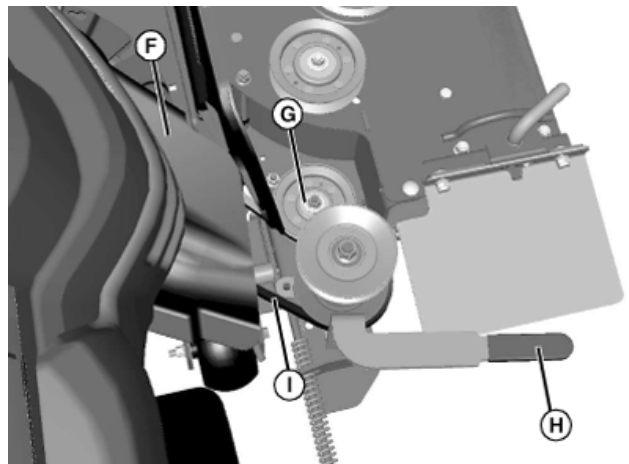
TCAL45169—UN—10APR13

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



TCAL45170—UN—10APR13

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



TCAL45171—UN—10APR13

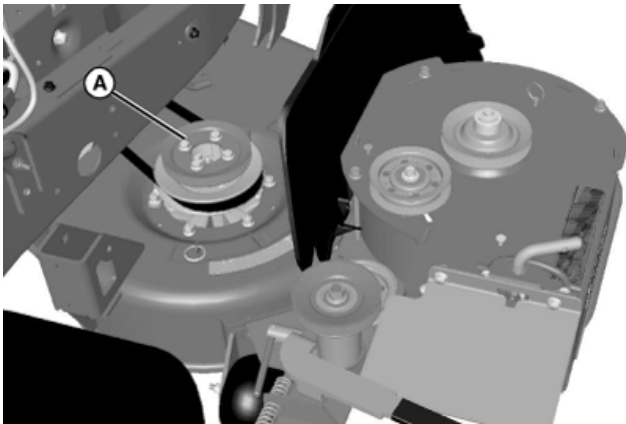
- Remove primary belt shield (F).
- Loosen nut (G) on tension pulley but do not remove.
NOTE: The use of the tension lever will be required to assist the removal of the belt.
- Rotate tension lever (H) and remove primary belt (I).
- Remove all grass accumulation around belt, idler and sheaves.

Installing Drive Belts

CAUTION: 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.

NOTE: Use the correct size sheave for your application. Sheaves should be included with the kit.

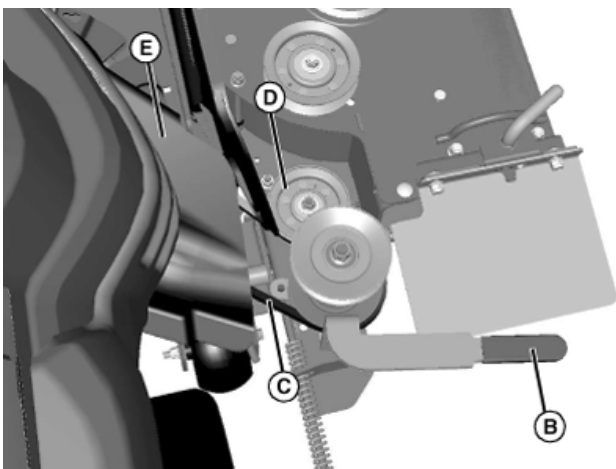
Service



TCAL45172—UN—10APR13

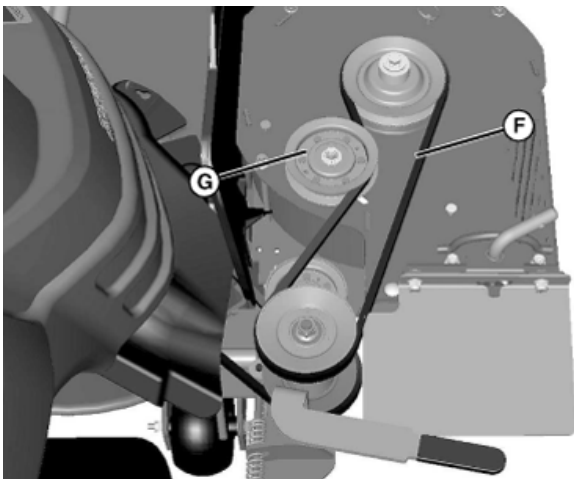
Parts have been removed for a clear illustration.

1. Install double sheave (A).



TCAL45173—UN—10APR13

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).



TCAL45174—UN—10APR13

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



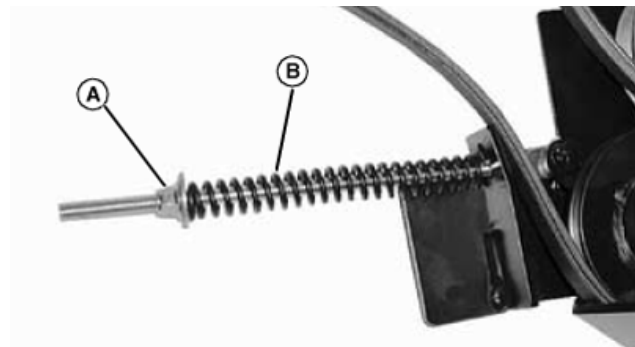
TCAL45175—UN—10APR13

5. Install secondary belt shield (H).

Adjust Primary Belt Tension

CAUTION: 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: Check tension of new belts after first five hours of operation, adjust if needed.



TCAL45176—UN—10APR13

1. With belt installed tighten nut (A) on tension rod until spring (B) length is within specification.

Specification

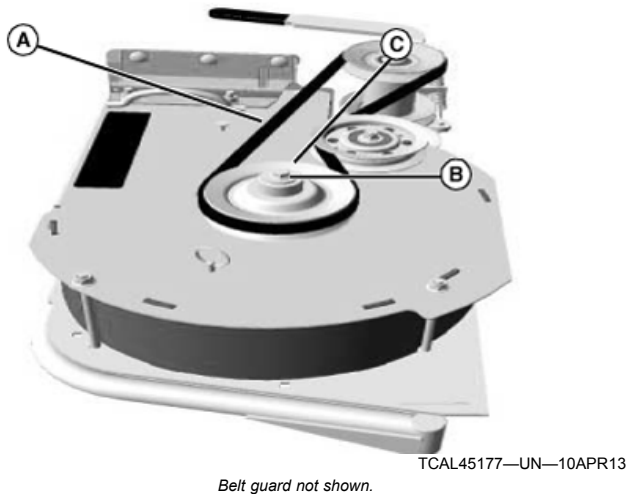
Tension Rod Spring — Length 150 mm +/- 10 mm (5.905 in. +/- 0.394 in.)

Adjust Secondary Belt Tension

CAUTION: 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: Check tension of new belts after first five hours of operation, adjust if needed.

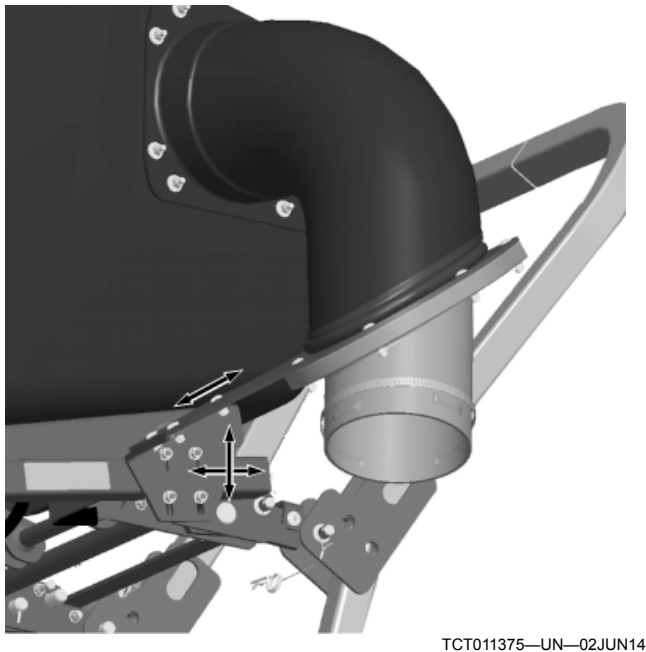
Adjustments



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.

Adjustments

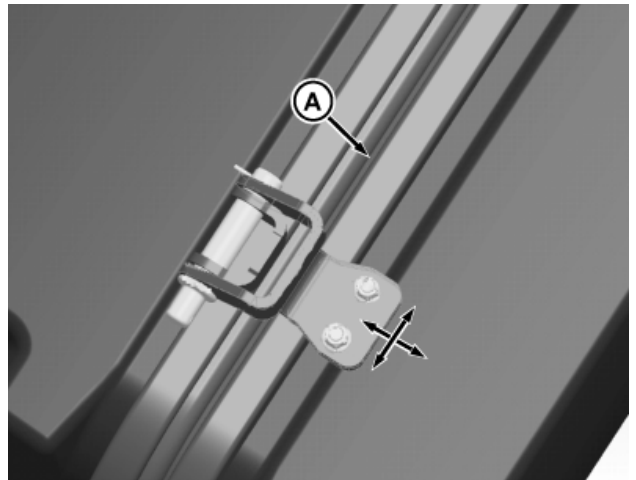
Hopper Elbow



Latch the tilt frame fully

- Adjust bracket at points shown to line up elbow with bracket and make sure seal is partially compressed and centered.
- Loosen four U-Bolt Nuts to adjust forward and aft.
- Loosen three nuts on bracket to adjust in and out.

Hopper Door



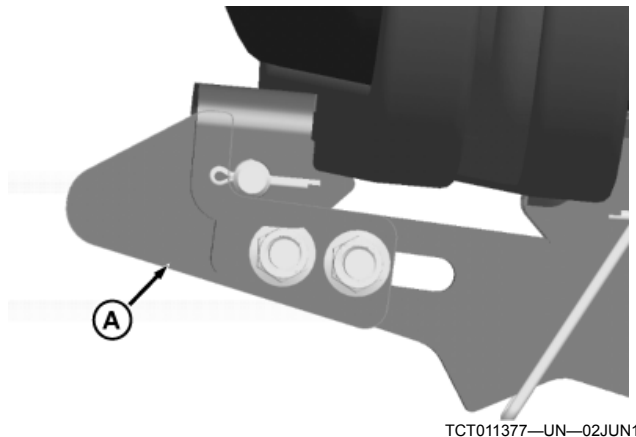
A — Lip

1. Loosen the 4 door hinge bolts.

NOTE: Make sure the screen and seal do not contact the sides of the door when it is closed.

2. Center door to hopper.
3. Compress just the lip of the door seal (A) all the way around with the door in the closed position. Tighten bolts.

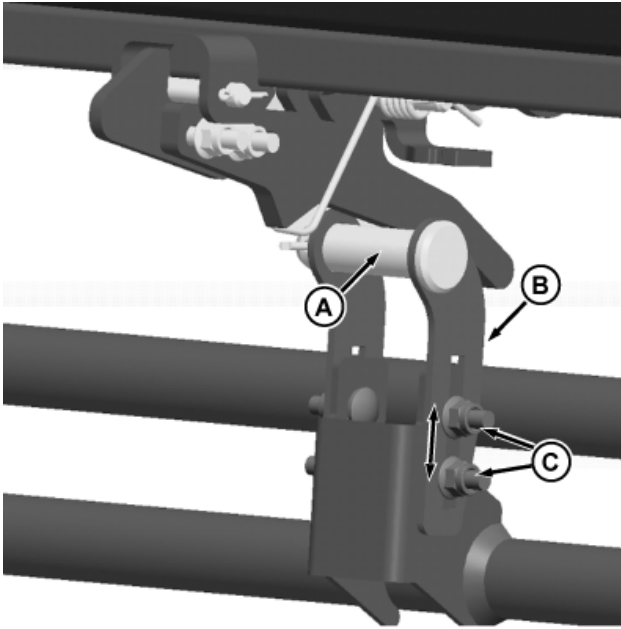
NOTE: Bolts can be loosened and adjusted side to side or compressed further.



A — Latch

4. With hopper closed and latched, put slight pressure on the door and adjust the door latch (A) to keep slight compression on the seal.

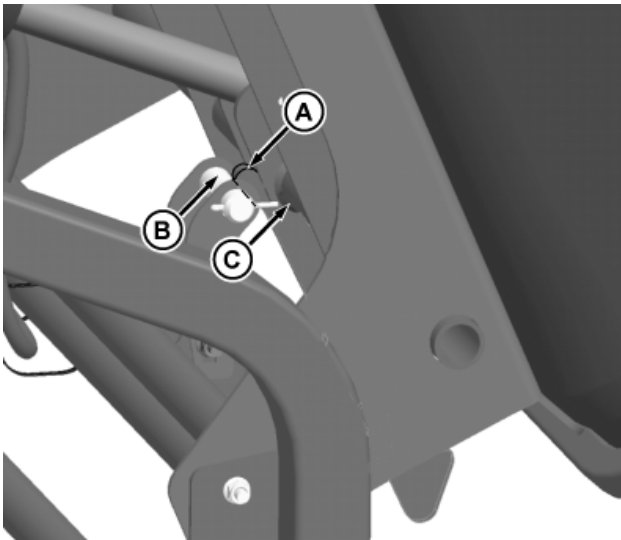
Troubleshooting



TCT011378—UN—02JUN14

A — Pin
B — Latch
C — Bolts

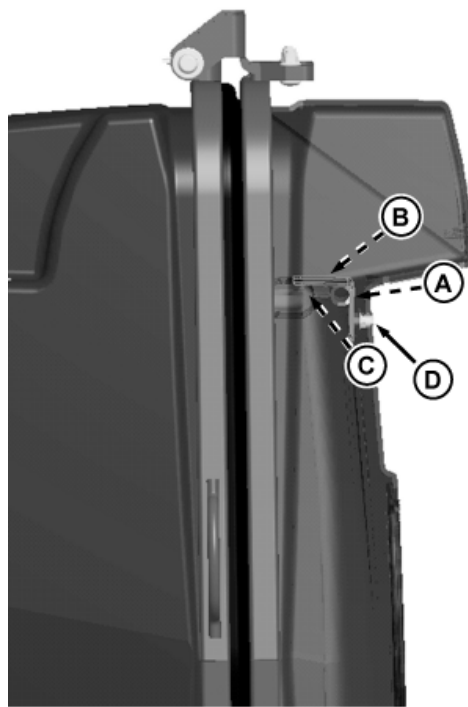
5. While hopper is closed, adjust the pin (A) until it touches but does not push on door latch (B) and tighten bolts (C).



TCT011379—UN—02JUN14

A — Latch
B — Pin
C — Tilt Frame

6. Operate hopper (dump) open and make sure the latch (A) does not come off the pin (B) and that it is not touching the tilt frame (C). (Adjust plates horizontally if needed).



TCT011380—UN—17JUN14

A — Screen Bulb Seal
B — Door Brace Support
C — Screen
D — Hardware

7. Close hopper and make sure the door latches fully. Repeat if necessary.
Adjustment of Door Brace
 - Check the Door Support position and make sure the screen bulb seal (A) is on all the way and that the door brace support (B) compresses the screen bulb seal, but does not collapse the screen bulb seal solid and causes the screen (C) to bend. Also make sure the door brace support (B) does not make contact with the screen when hopper is dumped.. The support can be adjusted up and down.
 - Adjusting this higher could help the door close better.
8. Tighten Hardware (D).

Troubleshooting

Using Troubleshooting Chart

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

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

Specifications

Specifications

14 Bushel Dump From Seat Hopper

The 14 Bushel Dump From Seat (DFS) Hopper is compatible with the Mid-Mount Z-Trak model Z997R.

Front Ballast Recommendation (See Installing Ballast)

Total Capacity0.46 m³(13 bu)

Weight (Hopper Empty) 101.6 kg (224 lb)

Primary Belt Tension Spring Length150 mm +/- 10 mm (6 in. +/- 0.4 in.)

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.

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.

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