

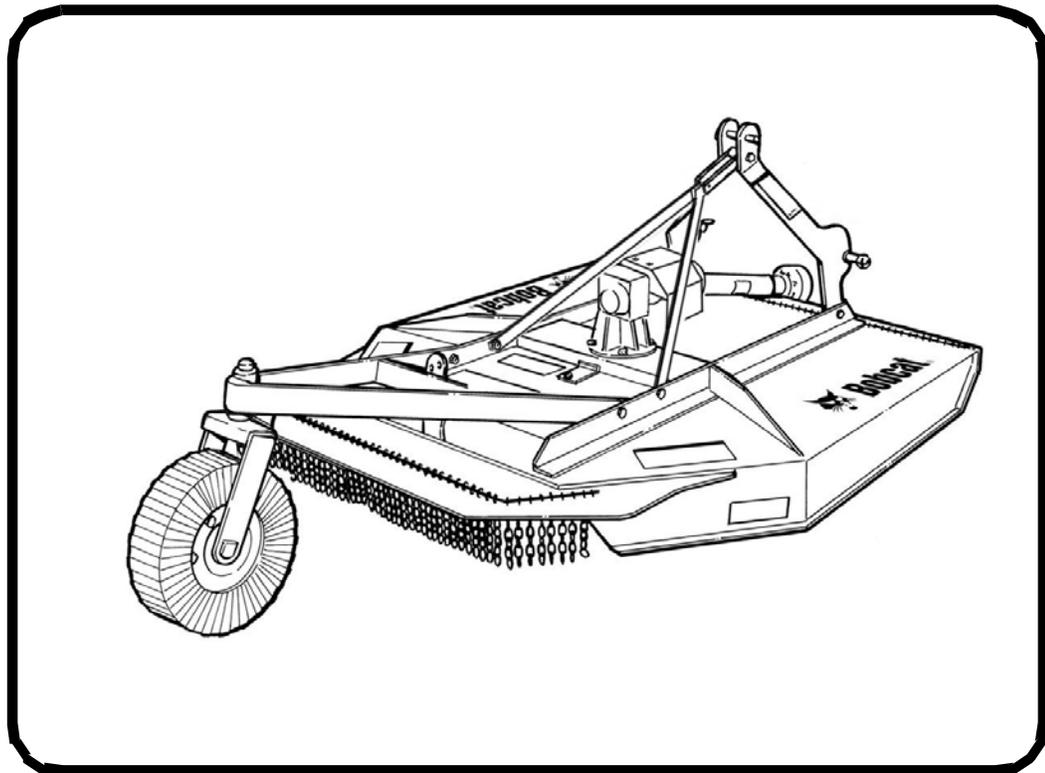


Bobcat®

Service Manual

Three-Point Rotary Cutter

(3RC60) S/N A7RR00101 & Above
(3RC70) S/N A7RS00101 & Above



Product: 2009 Bobcat Three-Point Rotary Cutter 3RC60,3RC70 Service Repair Workshop Manual

Full Download: <https://www.arepairmanual.com/downloads/2009-bobcat-three-po>

[int-rotary-cutter-3rc603rc70-service-repair-workshop-manual/](https://www.arepairmanual.com/downloads/2009-bobcat-three-point-rotary-cutter-3rc603rc70-service-repair-workshop-manual/)

Sample of manual. Download All 58 pages at:

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MAINTENANCE SAFETY



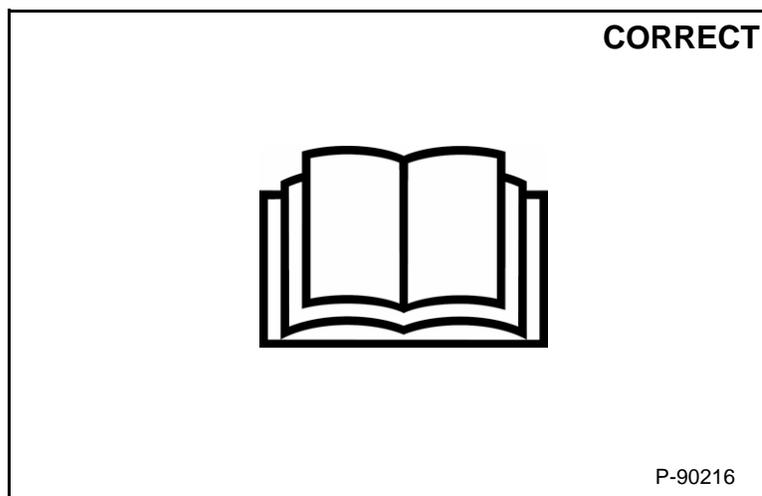
WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0807



Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



-  Never service attachments / implements without instructions. See Operation & Maintenance Manual and Attachment / Implement Service Manual.
-  Cleaning and maintenance are required daily.
-  Never service or adjust attachment / implement with the engine running unless instructed to do so in manual.
-  Always lower the attachment / implement to the ground before lubricating or servicing.
-  Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
-  Stop, cool and clean engine of flammable materials before checking fluids.
-  Keep body, loose objects and clothing away from moving parts, electrical contacts, hot parts and exhaust.
-  Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure and flying debris or when tools are used. Use eye protection approved for type of welding.



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REFERENCE INFORMATION

Write the correct information for YOUR three-point rotary cutter in the spaces below. Always use these numbers when referring to your three-point rotary cutter.

Three-Point Rotary Cutter
Serial Number

NOTES:

YOUR BOBCAT® DEALER:

ADDRESS:

PHONE:

Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128

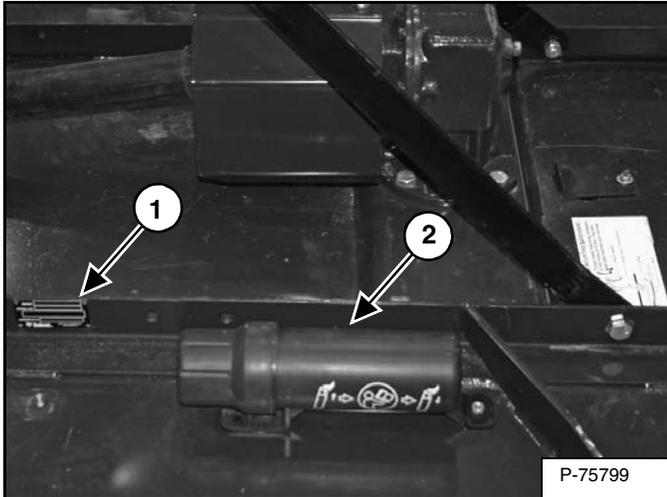
Bobcat Company Europe
Drève Richelle 167
B-1410 WATERLOO
Belgium



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SERIAL NUMBER LOCATION

Figure 1



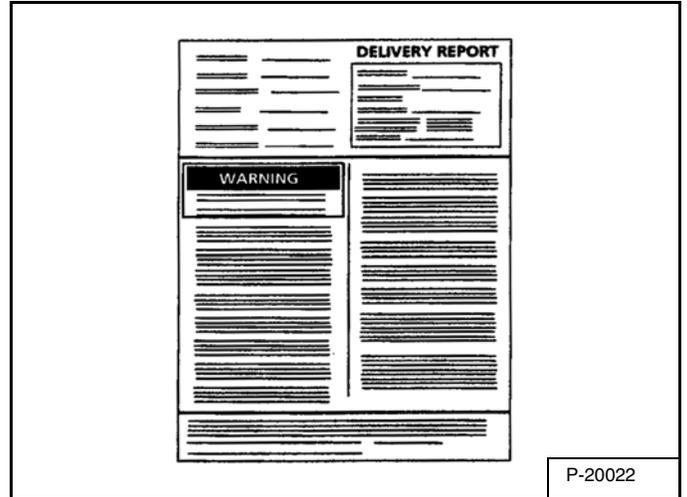
Always use the serial number (Item 1) **[Figure 1]** of the three-point rotary cutter when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation.

MANUAL STORAGE

The manual storage container (Item 2) **[Figure 1]** is located just to the rear of the serial number plate.

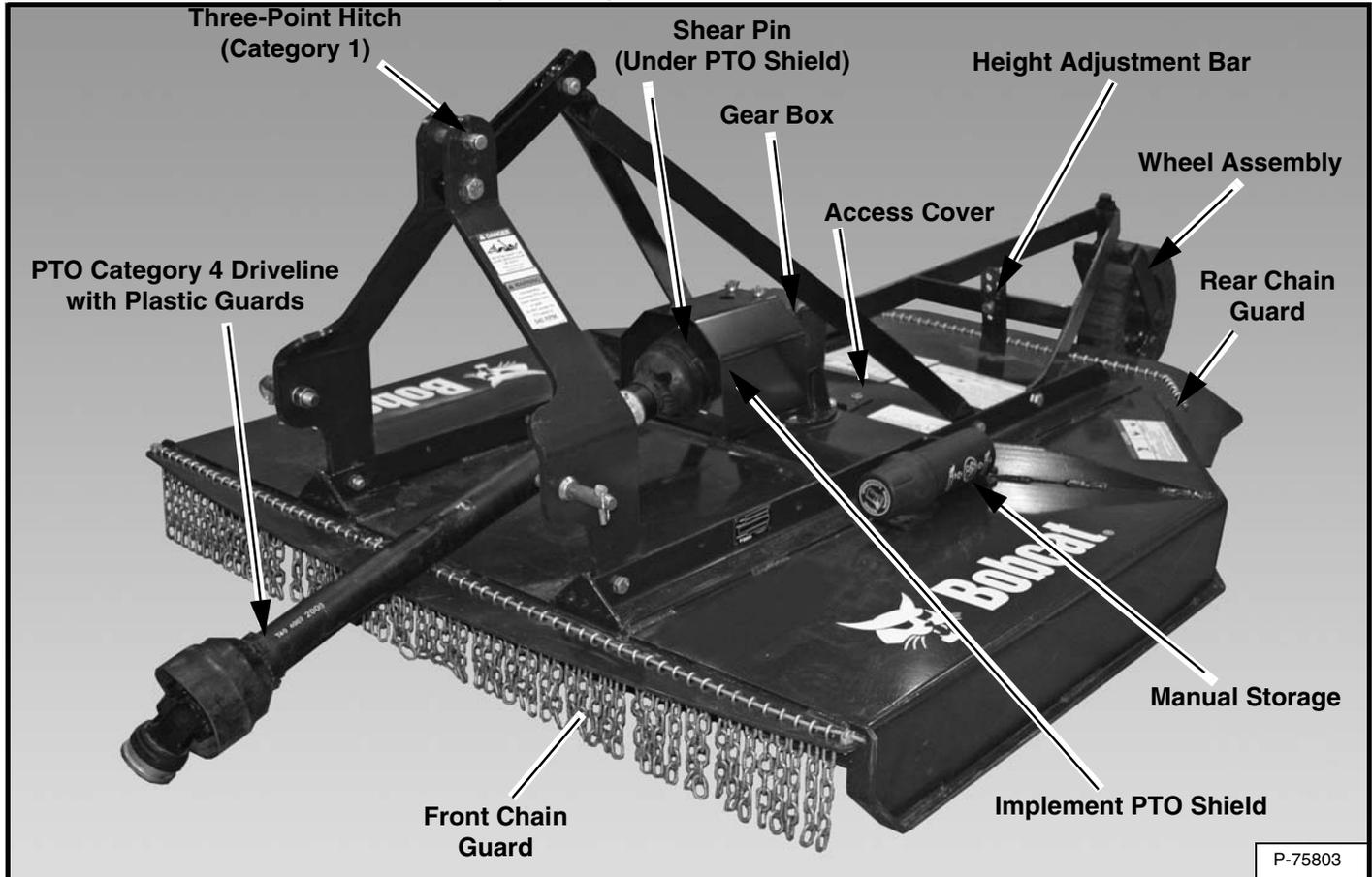
DELIVERY REPORT

Figure 2

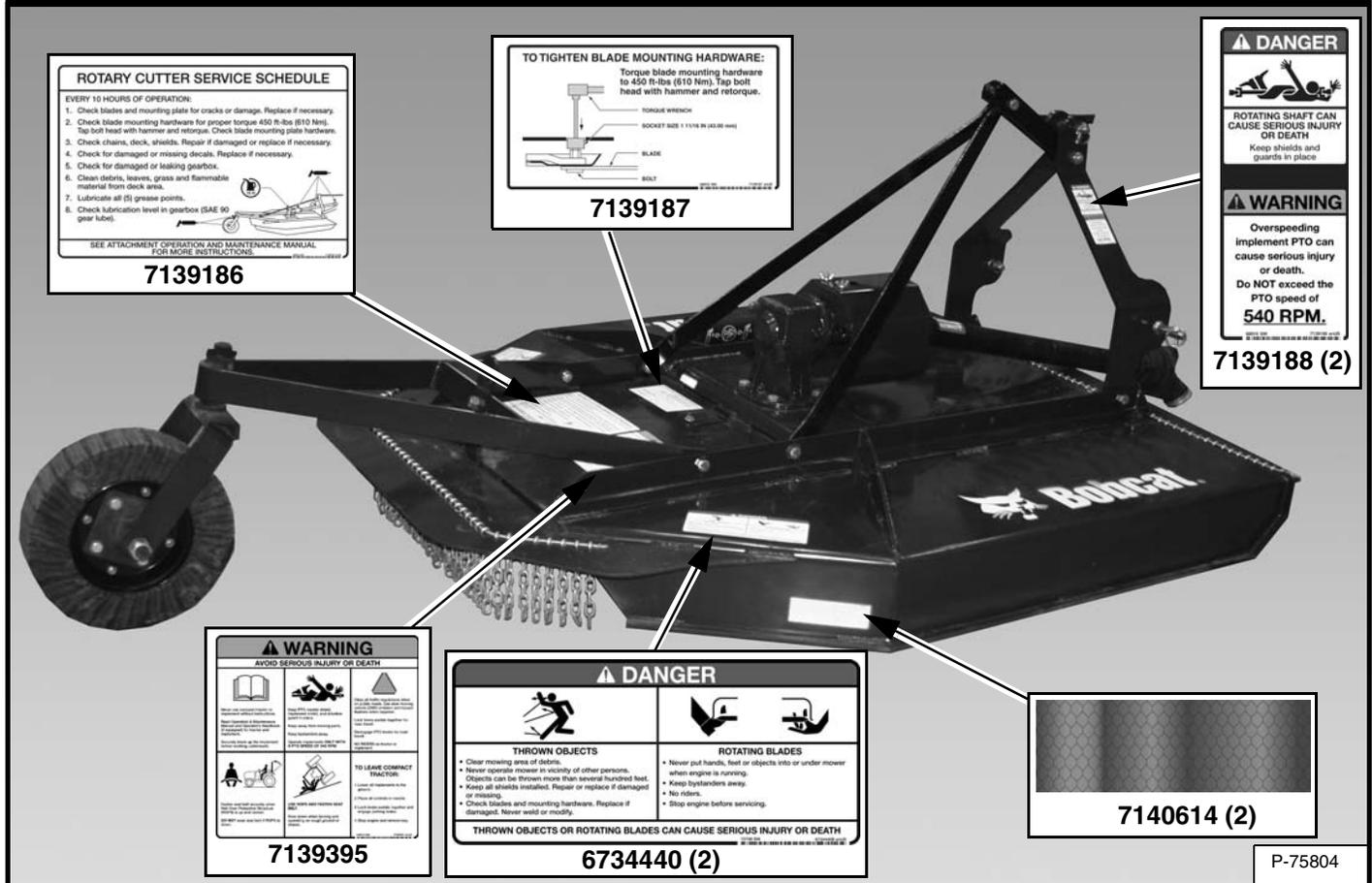


The delivery report must be filled out by the dealer and signed by the owner or operator when the three-point rotary cutter is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely **[Figure 2]**.

IDENTIFICATION AND MACHINE SIGNS (DECALS)



P-75803



P-75804

SAFETY & MAINTENANCE

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TROUBLESHOOTING

Chart

| PROBLEM | CAUSE | CORRECTION |
|-------------------------|---|-----------------------|
| Poor Cutting. | Travel speed too fast. | Reduce travel speed. |
| | Debris on blade mounting plate. | Clean mounting plate. |
| | Blades worn or damaged. | Replace blades. |
| Blades will not rotate. | Debris between blades and mounting plate. | Remove debris. |
| | Broken shear bolt. | Replace shear bolt. |

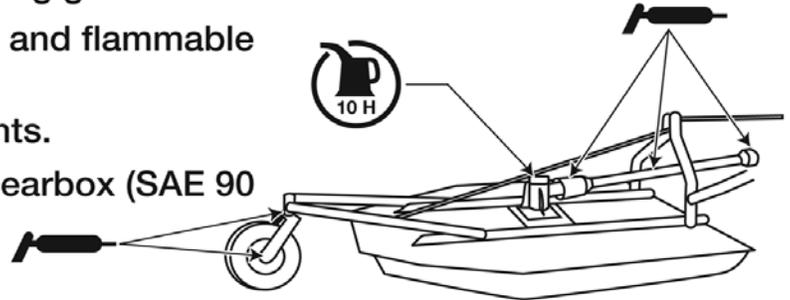


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ROTARY CUTTER SERVICE SCHEDULE

EVERY 10 HOURS OF OPERATION:

1. Check blades and mounting plate for cracks or damage. Replace if necessary.
2. Check blade mounting hardware for proper torque 450 ft-lbs (610 Nm). Tap bolt head with hammer and retorque. Check blade mounting plate hardware.
3. Check chains, deck, shields. Repair if damaged or replace if necessary.
4. Check for damaged or missing decals. Replace if necessary.
5. Check for damaged or leaking gearbox.
6. Clean debris, leaves, grass and flammable material from deck area.
7. Lubricate all (5) grease points.
8. Check lubrication level in gearbox (SAE 90 gear lube).



SEE ATTACHMENT OPERATION AND MAINTENANCE MANUAL
FOR MORE INSTRUCTIONS.

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LUBRICATING THE ATTACHMENT

Lubrication Locations

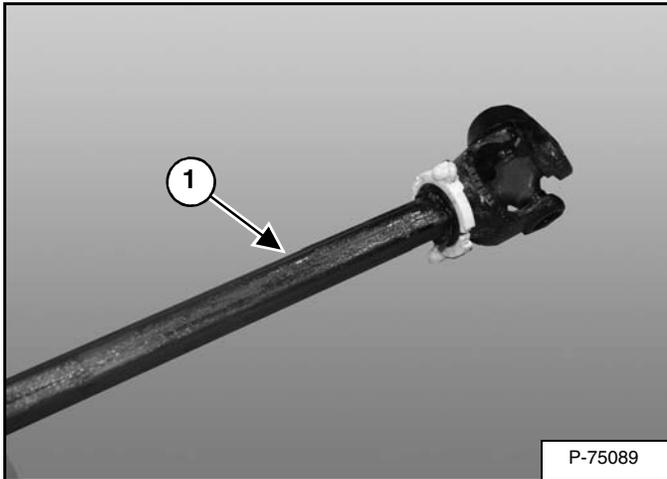
Always use a good quality lithium base multi-purpose grease when lubricating the attachment. Apply lubricant until extra grease shows.

IMPORTANT

Fluid such as engine oil, hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for the correct disposal.

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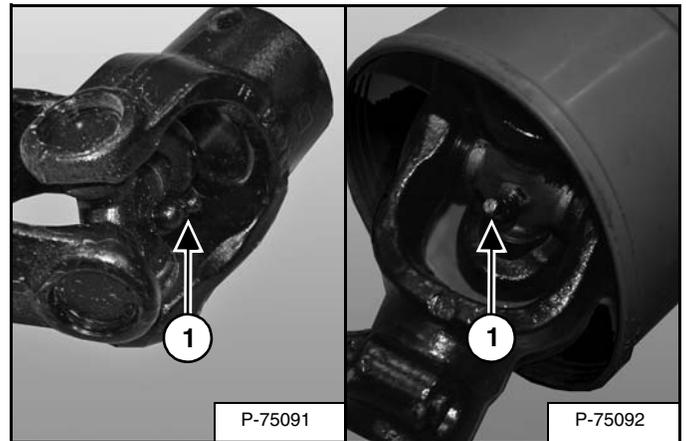
Figure 10-30-1



Lubricate the following every 10 hours of operation.

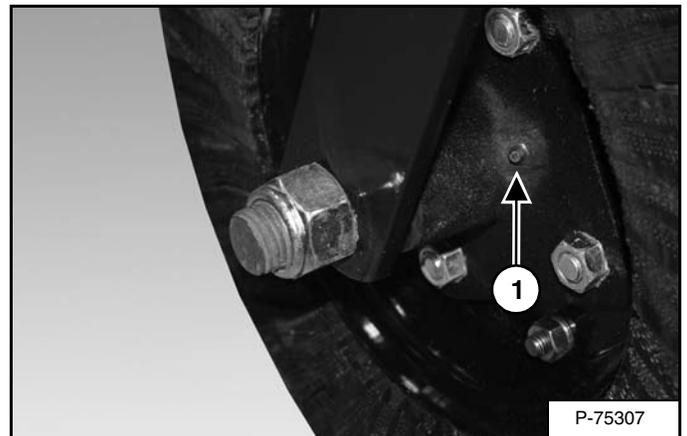
Apply grease to the PTO driveline (Item 1) [Figure 10-30-1].

Figure 10-30-2



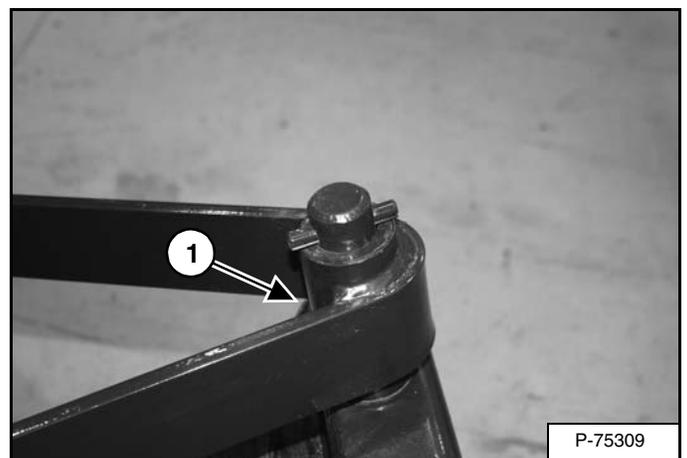
Lubricate the u-joints (Item 1) [Figure 10-30-2] on both ends of the PTO driveline.

Figure 10-30-3



Lubricate the fitting (Item 1) [Figure 10-30-3] on the wheel hub.

Figure 10-30-4



Lubricate the fitting (Item 1) [Figure 10-30-4] on the pivot shaft.



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REMOVAL AND INSTALLATION OF CHAIN GUARDS

Procedure

! WARNING

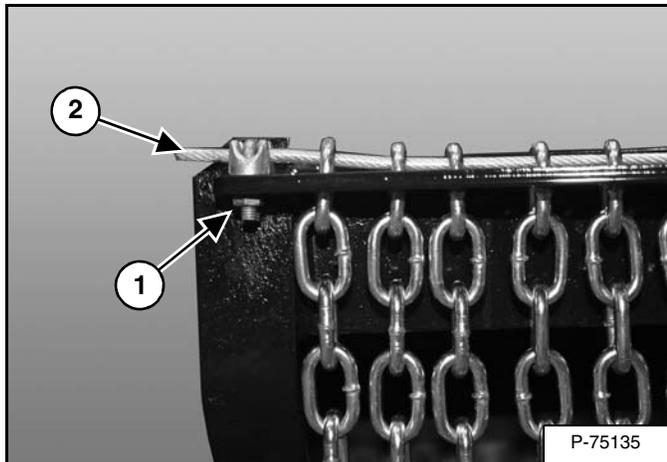
AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-0907

Figure 10-40-1



Loosen nuts (Item 1) and remove the cable (Item 2) [Figure 10-40-1] from the clamp.

Pull the cable through the chains and replace the chains as needed (front or rear).

Installation: Replace chains, install the cable through the clamp. Pull the cable tight and tighten the nuts.

! WARNING

AVOID INJURY OR DEATH

Never operate rotary cutter without front or rear chain guards.

W-2698-1007

! WARNING

AVOID INJURY OR DEATH

- Do NOT exceed the rated implement PTO speed.
- Stay clear of rotating driveline.
- Keep bystanders away.
- Keep hands, feet, clothing and long hair away.
- Keep PTO shields and all guards in place.
- Disengage PTO (rear and mid), engage the parking brake, stop the engine and make sure all rotating components are stopped before exiting compact tractor.
- Do NOT service the compact tractor or implement with the PTO (rear or mid) engaged.
- Do NOT service the implement in a raised position unless properly blocked and with all rotating components stopped.
- Disengage PTO (rear and mid) for road travel.

W-2697-1007



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REMOVAL AND INSTALLATION OF SHEAR BOLT (GRADE 2)

Procedure

WARNING

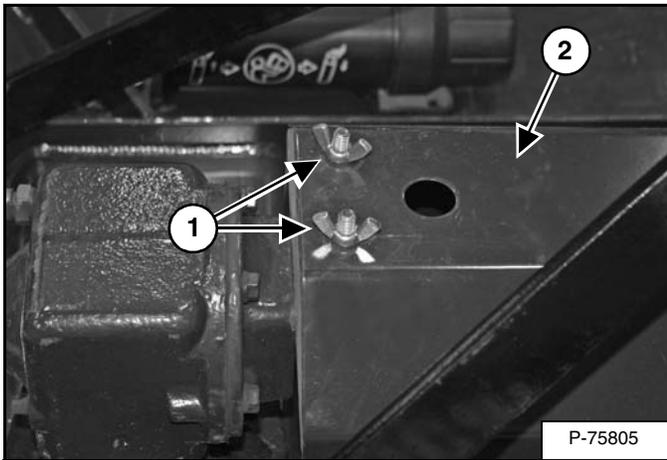
AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

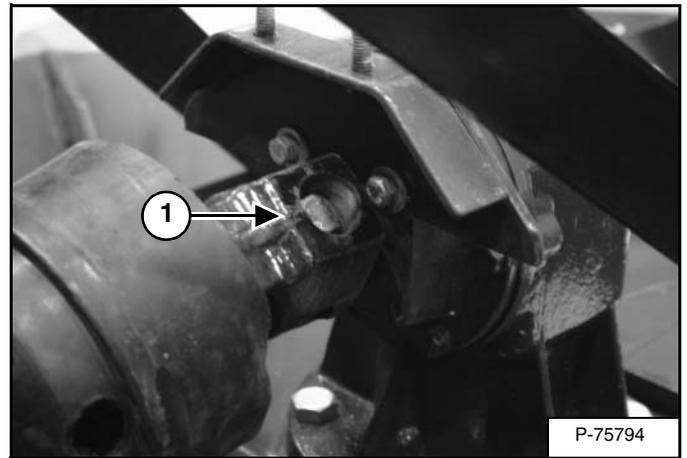
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Figure 10-50-1



Remove the two wing nuts (Item 1), then remove the implement PTO shield (Item 2) [Figure 10-50-1].

Figure 10-50-2



Install the Grade 2 shear bolt (Item 1) [Figure 10-50-2] through the PTO driveline and gear box shaft. Install and tighten the lock nut.

Reinstall implement PTO shield.

WARNING

AVOID INJURY OR DEATH

- Do NOT exceed the rated implement PTO speed.
- Stay clear of rotating driveline.
- Keep bystanders away.
- Keep hands, feet, clothing and long hair away.
- Keep PTO shields and all guards in place.
- Disengage PTO (rear and mid), engage the parking brake, stop the engine and make sure all rotating components are stopped before exiting compact tractor.
- Do NOT service the compact tractor or implement with the PTO (rear or mid) engaged.
- Do NOT service the implement in a raised position unless properly blocked and with all rotating components stopped.
- Disengage PTO (rear and mid) for road travel.

W-2697-1007



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ATTACHMENT STORAGE AND RETURN TO SERVICE

Storage

Sometimes it may be necessary to store your Bobcat implement / attachment for an extended period of time. Below is a list of items to perform before storage.

- Thoroughly clean the implement / attachment.
- Check for loose hardware, missing guards, or damaged parts.
- Replace worn or damaged parts.
- Check for damaged or missing decals. Replace if necessary.
- Place the attachment in a dry protected shelter.
- Place the attachment flat on the ground.

NOTE: In muddy conditions or to prevent the implement / attachment from freezing to the ground, put the attachment on planks or blocks before removing the implement / attachment from the compact tractor.

Return to Service

After the Bobcat implement / attachment has been in storage, it is necessary to follow a list of items to return the implement / attachment to service.

- Be sure all shields and guards are in place.
- Install and operate implement / attachment, check for correct function.
- Check for leaks. Repair as needed.



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REGULAR MAINTENANCE ITEMS

Gearbox Fluid

! WARNING

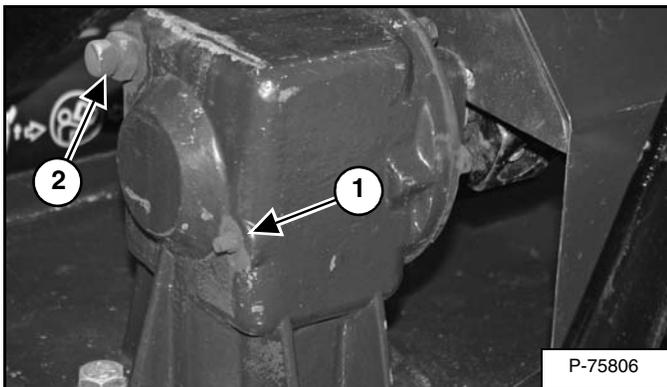
AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-0907

Figure 10-70-1



Remove plug (Item 1) and plug (Item 2) [Figure 10-70-1].

Add SAE 90 gear lube through the top hole until gear lube flows out the lower hole. Install plugs (Item 1 & 2) [Figure 10-70-1].

Cleaning The Three-Point Rotary Cutter

Stop the machine and implement on a flat level surface.

Raise the compact tractor's three-point hitch lift links high enough to allow jack stands to be placed under the deck. (See the compact tractor's Operation & Maintenance Manual for detailed information on operating the compact tractor.)

Engage the parking brake. Disengage the rear-PTO and place all controls in neutral. Stop the engine, unfasten the seat belt, and remove the key

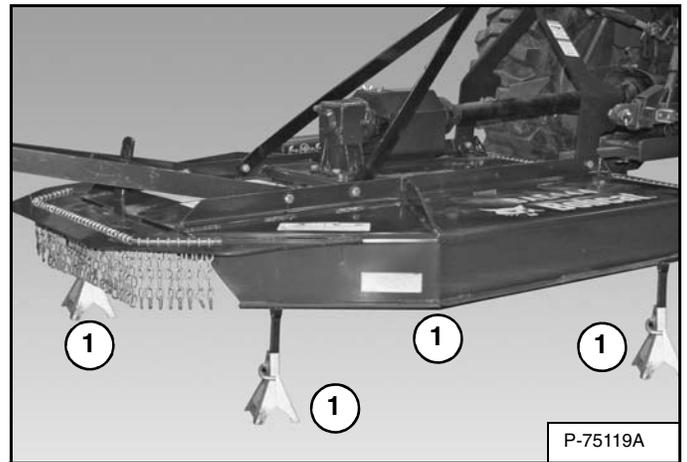
! WARNING

AVOID INJURY OR DEATH

Securely block up the implement before working underneath.

W-2565-0207

Figure 10-70-2



Place jack stands (Item 1) [Figure 10-70-2] underneath the deck.

Move to the operator's position, fasten seat belt, start the engine and release the parking brake.

Lower the three-point hitch and three-point rotary cutter down until it is securely on top of the jack stands.

Disconnect the PTO driveline.

! WARNING

AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-0907

Use water or air pressure to clean debris from the three-point rotary cutter.

Use care when removing any obstructions that are wrapped around blades and driveline.

! WARNING

AVOID INJURY OR DEATH

Never put hands, feet, or objects under rotary cutter when engine is running.

W-2296-0198



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MAIN FRAME

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**MAIN
FRAME**



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CUTTING BLADES

Removal And Installation

NOTE: Refer to the service schedule for maintenance checks. (See SERVICE SCHEDULE on Page 10-20-1.)

Service the blades only when attached to the compact tractor.

Stop the machine and implement on a flat level surface.

Raise the compact tractor's three-point hitch lift links high enough to allow jack stands to be placed under the deck. (See the compact tractor's Operation & Maintenance Manual for detailed information on operating the compact tractor.)

Lock the brake pedals together and engage the parking brake. Fully lower the loader arms and put attachment flat on the ground (if equipped). Disengage the rear-PTO and place all controls in neutral. Stop the engine, unfasten the seat belt, and remove the key.

Install blocks in front of and behind the rear tires of the compact tractor.

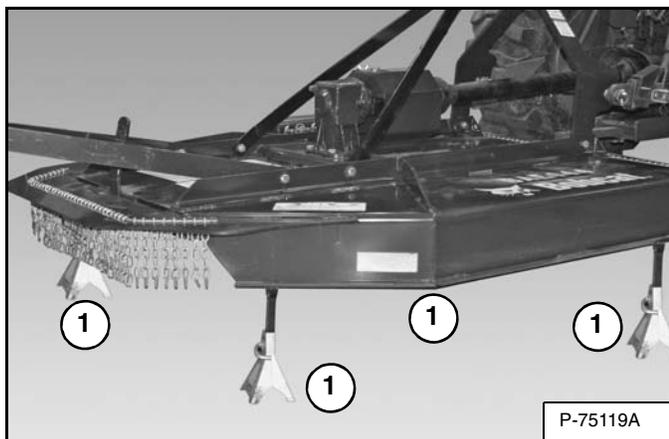


AVOID INJURY OR DEATH

Securely block up the implement before working underneath.

W-2565-0207

Figure 20-10-1



Place jack stands (Item 1) [Figure 20-10-1] underneath the deck.

Move to the operator's position, fasten seat belt, start the engine.

Sample of manual. Download All 58 pages at:

<https://www.arepairmanual.com/downloads/2009-bobcat-three-point-rotary-cutter-3rc603rc70-service-repair-workshop-manual/>

Lower the three-point hitch and three-point rotary cutter down until it is secure on top of the jack stands.

Disconnect the PTO driveline.



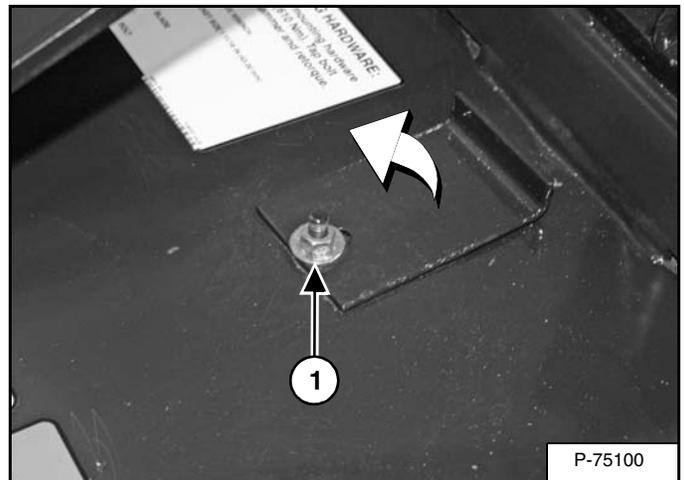
AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-0907

Figure 20-10-2



Loosen nut (Item 1) [Figure 20-10-2] and rotate debris cap.



AVOID INJURY OR DEATH

Never put hands, feet, or objects under rotary cutter when engine is running.

W-2296-0198