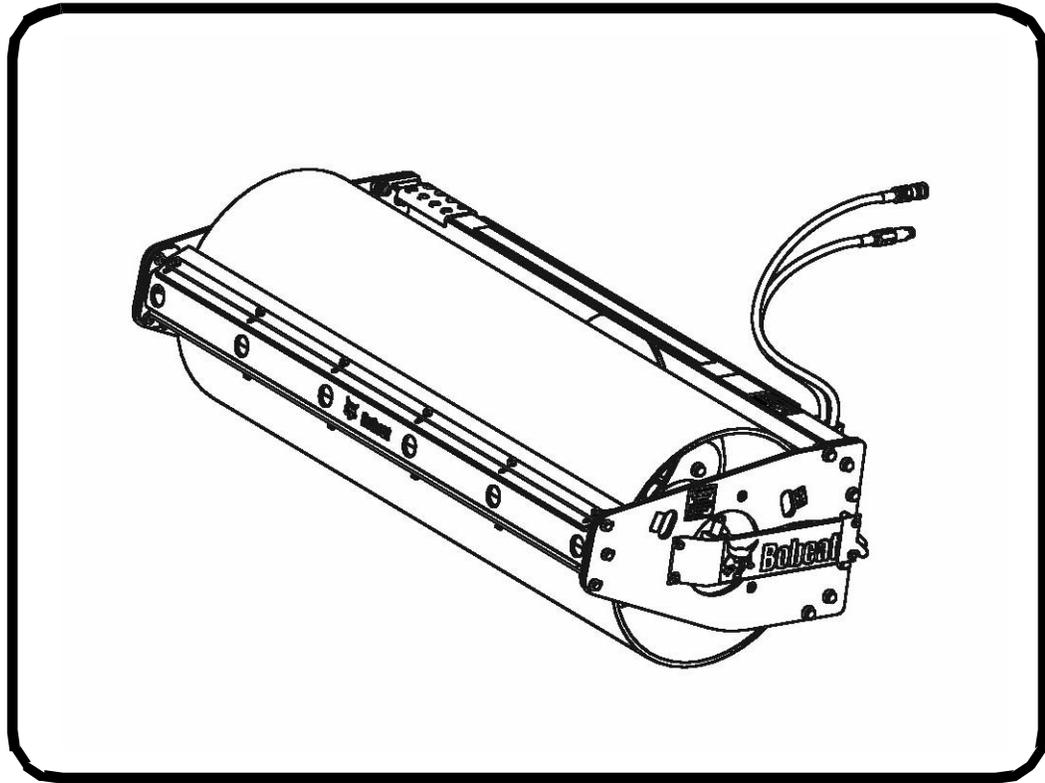




Bobcat®

Service Manual Vibratory Roller

(Roller 48 Padded) S/N AFLJ00101 & Above
(Roller 48 Smooth) S/N AFLK00101 & Above
(Roller 73 Padded) S/N AFLD00101 & Above
(Roller 73 Smooth) S/N AFLE00101 & Above
(Roller 80 Smooth) S/N AFLC00101 & Above



Product: 2009 Bobcat Roller 48 Padded/Smooth, Roller 73 Padded/Smooth, Roller 80 Smooth Vibratory Roller Service Repair Workshop Manual
Full Download: <https://www.arepairmanual.com/downloads/2009-bobcat-roller-48-padded-smoothroller-73-padded-smoothroller-80-smooth-vibratory-roller-service-repair-workshop-manual/>

Sample of manual. Download All 94 pages at:
<https://www.arepairmanual.com/downloads/2009-bobcat-roller-48-padded-smoothroller-73-padded-smoothroller-80-smooth-vibratory-roller-service-repair-workshop-manual/>

MAINTENANCE SAFETY



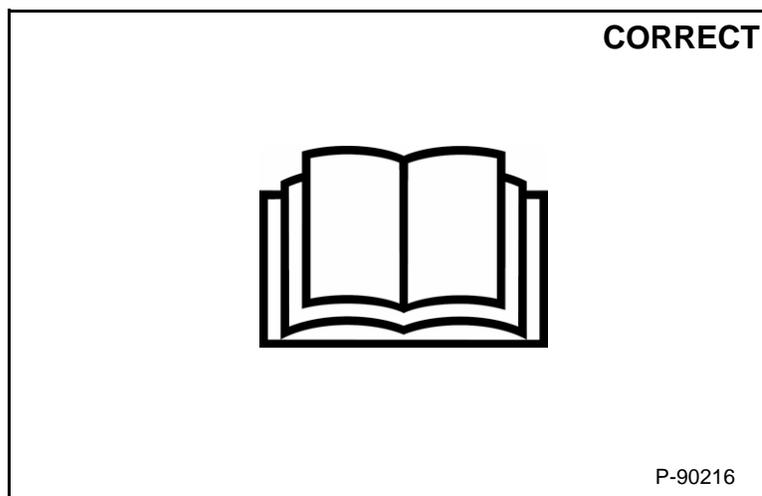
WARNING

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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ALPHABETICAL INDEX

ATTACHMENT STORAGE AND RETURN TO SERVICE	10-40-1
DRIVE SHAFT AND ECCENTRIC CASE	30-60-1
HYDRAULIC CONNECTION SPECIFICATIONS	SPEC-20-1
HYDRAULIC MOTOR	20-20-1
HYDRAULIC RELIEF	20-10-1
INSPECTION	10-30-1
ISOLATOR PLATE ASSEMBLY	30-50-1
LUBRICATING THE ATTACHMENT	10-60-1
MAIN FRAME	30-40-1
OSCILLATION WEAR PLATES	30-80-1
REGULAR MAINTENANCE ITEMS	10-50-1
ROLLER DRUM	30-70-1
(ROLLER 48 PADDED) SPECIFICATIONS	SPEC-10-2
(ROLLER 48 SMOOTH) SPECIFICATIONS	SPEC-10-3
(ROLLER 73 PADDED) SPECIFICATIONS	SPEC-10-4
(ROLLER 73 SMOOTH) SPECIFICATIONS	SPEC-10-5
(ROLLER 80 SMOOTH) SPECIFICATIONS	SPEC-10-6
SCHEMATIC(S)	SPEC-10-1
SCRAPER EDGES	30-10-1
SCRAPER FRAME	30-20-1
SERVICE SCHEDULE	10-20-1
SMOOTH SHELLS	30-30-1
TORQUE SPECIFICATIONS FOR BOLTS	SPEC-30-1
TROUBLESHOOTING	10-10-1



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CONTENTS

SERIAL NUMBER LOCATION III
DELIVERY REPORT III
IDENTIFICATION AND MACHINE SIGNS (DECALS) IV
SAFETY AND MAINTENANCE 10-01
HYDRAULIC SYSTEM 20-01
MAIN FRAME 30-01
SPECIFICATIONS AND SCHEMATICS SPEC-01

**SAFETY AND
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**MAIN
FRAME**

**SPECIFICATIONS
AND
SCHEMATICS**

REFERENCE INFORMATION

Write the correct information for YOUR vibratory roller attachment in the spaces below. Always use these numbers when referring to your vibratory roller.

Vibratory Roller 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



Bobcat®

SERIAL NUMBER LOCATION

Figure 1

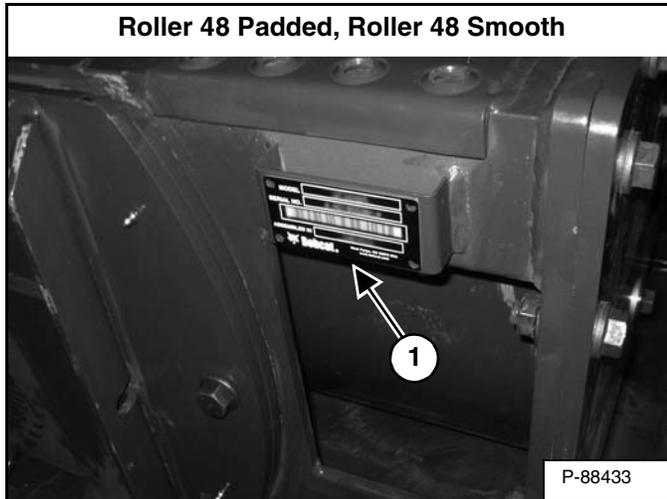
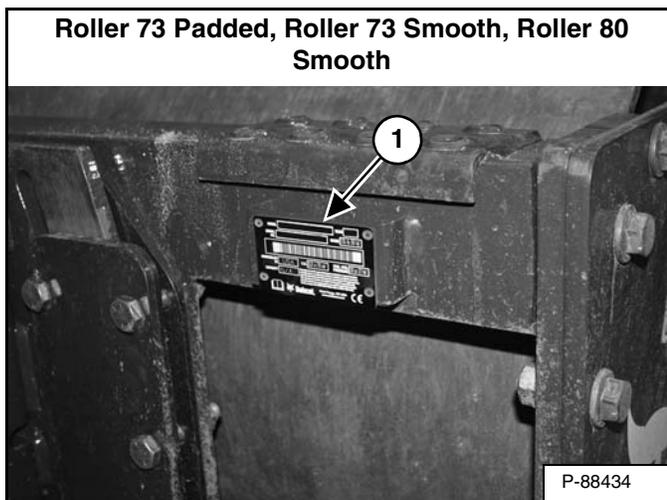


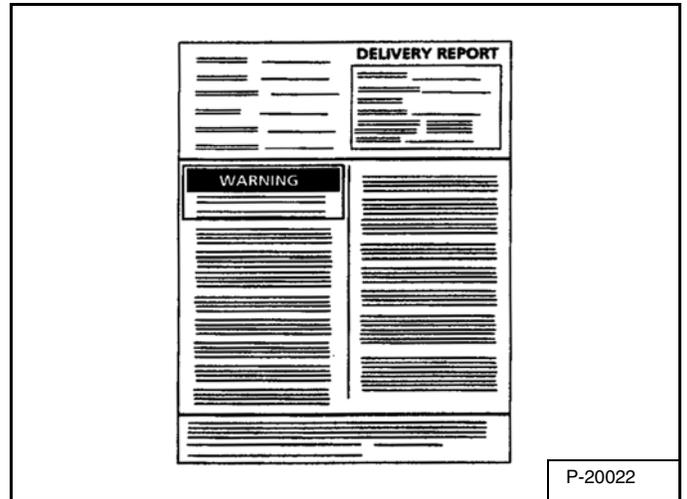
Figure 2



Always use the serial number (Item 1) [Figure 1] & [Figure 2] of the vibratory roller 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.

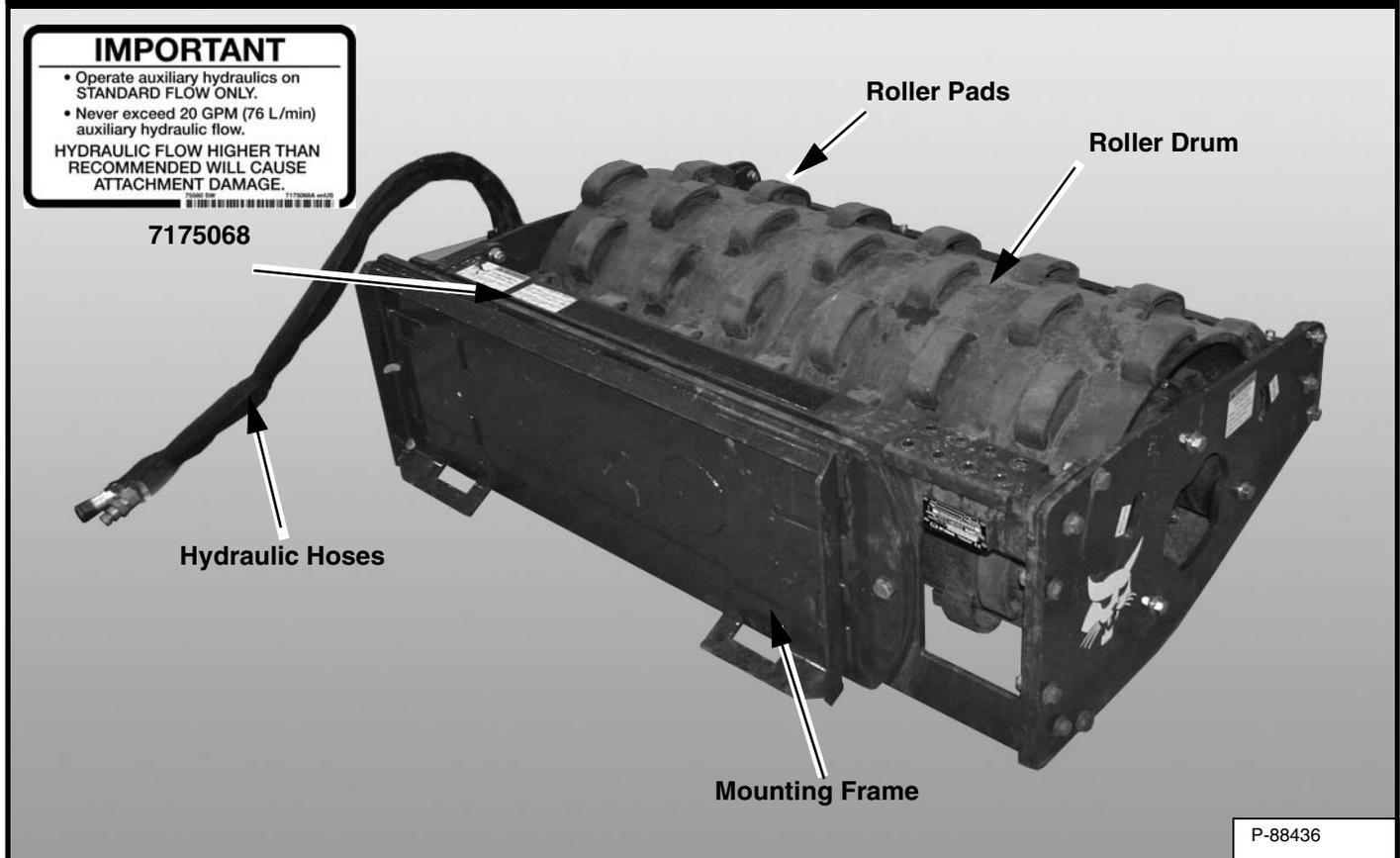
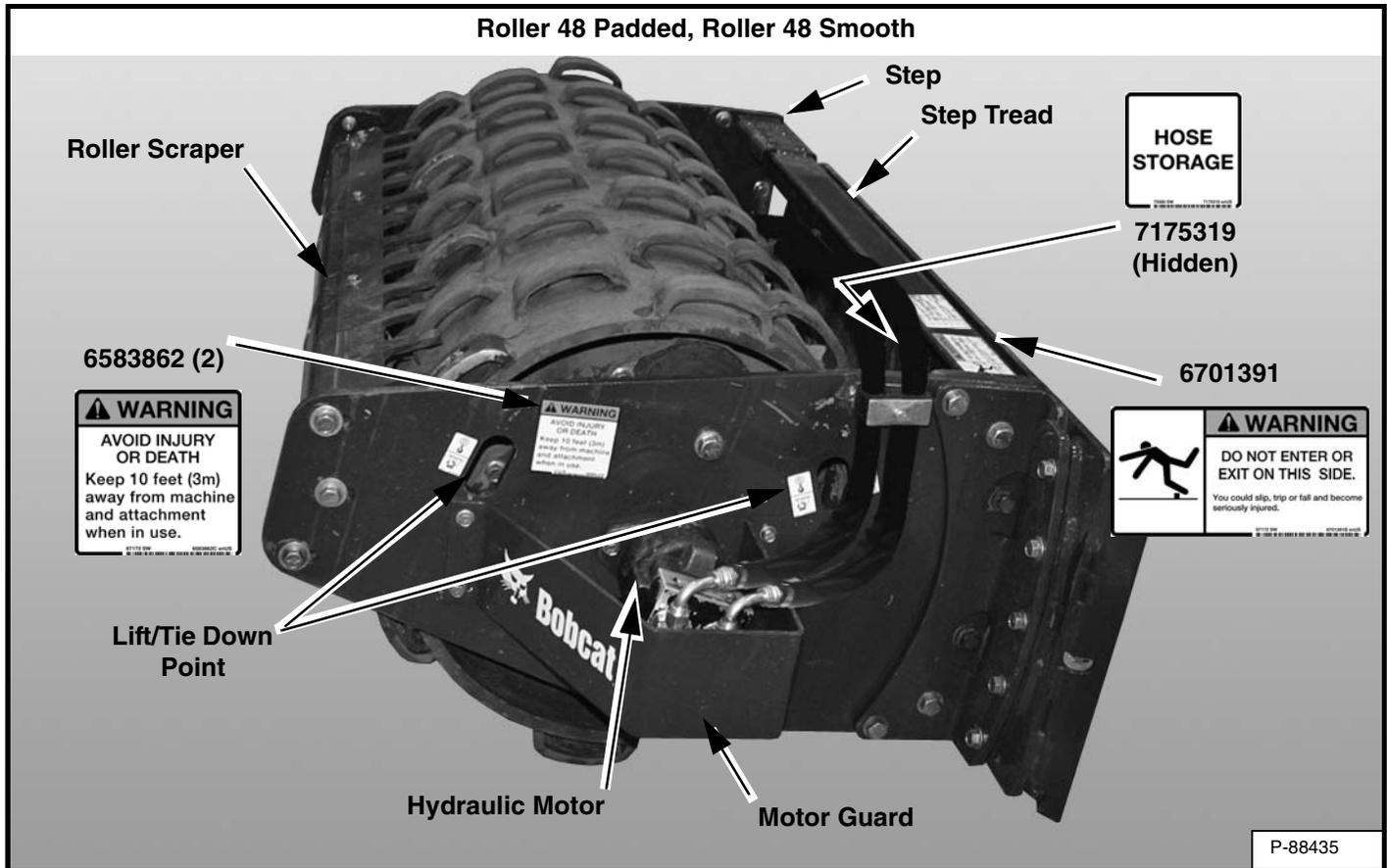
DELIVERY REPORT

Figure 3



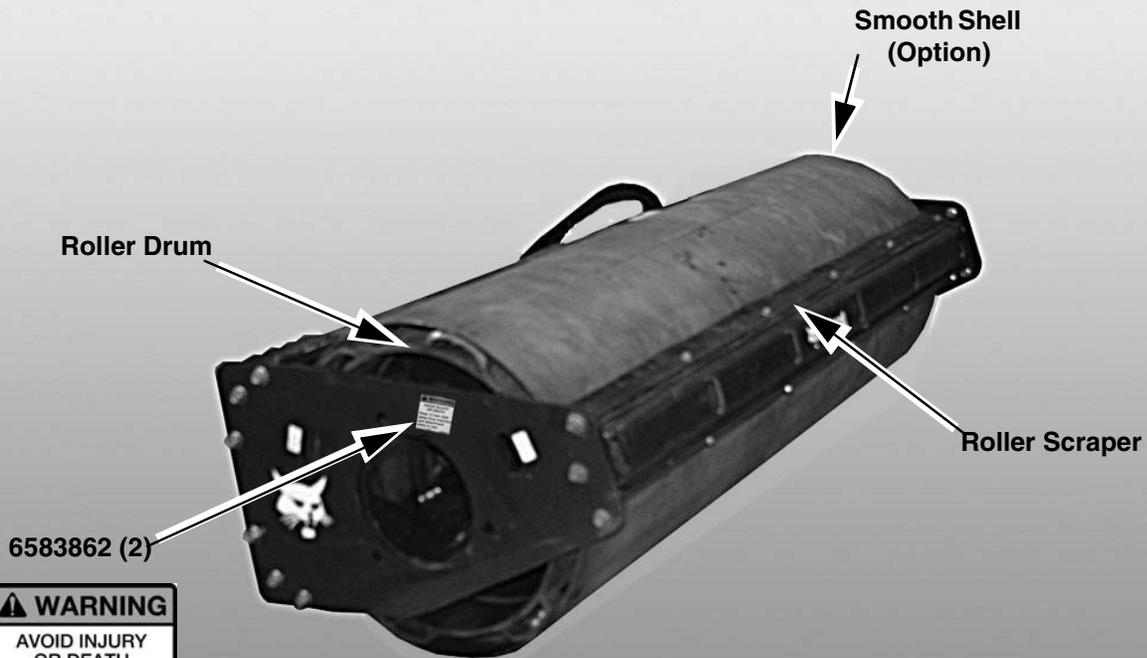
The delivery report must be filled out by the dealer and signed by the owner or operator when the vibratory roller is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely [Figure 3].

IDENTIFICATION AND MACHINE SIGNS (DECALS)



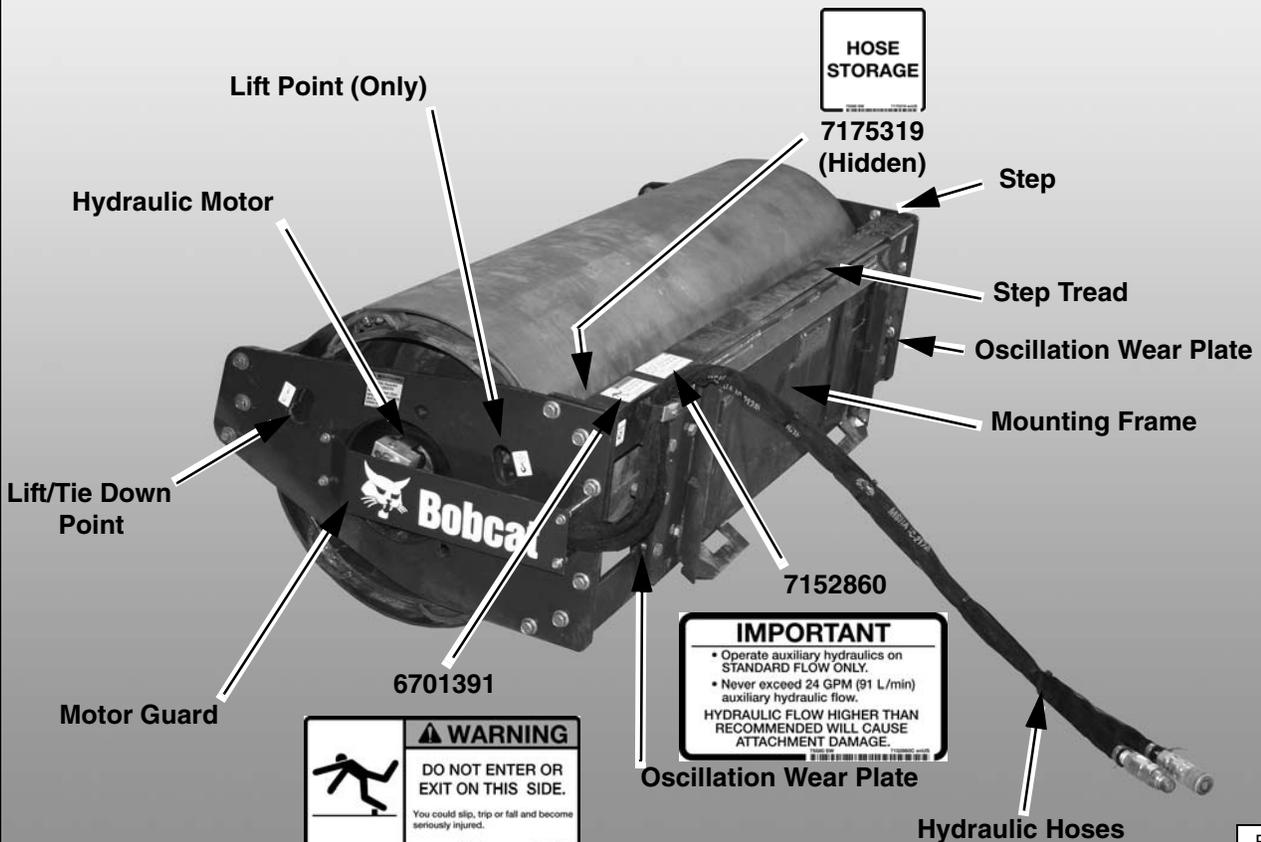
IDENTIFICATION AND MACHINE SIGNS (DECALS) (CONT'D)

Roller 73 Padded, Roller 73 Smooth, Roller 80 Smooth



WARNING
 AVOID INJURY OR DEATH
 Keep 10 feet (3m) away from machine and attachment when in use.

P-83656



WARNING
 DO NOT ENTER OR EXIT ON THIS SIDE.
 You could slip, trip or fall and become seriously injured.

IMPORTANT
 • Operate auxiliary hydraulics on STANDARD FLOW ONLY.
 • Never exceed 24 GPM (91 L/min) auxiliary hydraulic flow.
 HYDRAULIC FLOW HIGHER THAN RECOMMENDED WILL CAUSE ATTACHMENT DAMAGE.

P-83652



Bobcat®

SAFETY AND MAINTENANCE

SAFETY AND MAINTENANCE

ATTACHMENT STORAGE AND RETURN TO SERVICE	10-40-1
Return to Service	10-40-1
Storage	10-40-1
INSPECTION	10-30-1
Attachment Mounting Frame	10-30-1
Bob-Tach	10-30-1
LUBRICATING THE ATTACHMENT	10-60-1
Lubrication Locations	10-60-1
REGULAR MAINTENANCE ITEMS	10-50-1
Eccentric Case Fluid	10-50-1
Scraper Frame and Edge Adjustment	10-50-2
Wear Plate Adjustment	10-50-1
SERVICE SCHEDULE	10-20-1
Chart	10-20-1
TROUBLESHOOTING	10-10-1
Chart	10-10-1



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TROUBLESHOOTING

Chart

Use the following troubleshooting charts to locate and correct problems which most often occur with the vibratory roller.

48 In. Vibratory Roller Models		
PROBLEM	CAUSE	CORRECTION
Vibratory Roller shaft will not rotate	Loader fluid reservoir is low	Add fluid to reservoir on loader
	No fluid to vibratory roller	Check connections and flow to roller
	Loader hydraulic pump not working	Repair or replace as needed
	Damaged quick couplers	Replace quick couplers
	Coupler flexible element is broken or torn	Replace the flexible element
Vibratory Roller shaft rotates slowly	Not enough hydraulic flow	Test loader hydraulics for flow and pressure
	Relief valve in hydraulic cushion is not functioning	See the vibratory roller Service Manual for the correct procedure
Vibratory Roller shaft will not rotate	Loader fluid reservoir is low	Add fluid to reservoir on loader, remove relief valve and inspect O-ring condition
Does not oscillate	Lack of lubrication	Grease the mounting frame

73 & 80 In. Vibratory Roller Models		
PROBLEM	CAUSE	CORRECTION
Vibratory Roller shaft will not rotate	Loader fluid reservoir is low	Add fluid to reservoir on loader
	No fluid to vibratory roller	Check connections and flow to roller
	Loader hydraulic pump not working	Repair or replace as needed
	Damaged quick couplers	Replace quick couplers
	Coupler flexible element is broken or torn	Replace the flexible element
Vibratory Roller shaft rotates slowly	Not enough hydraulic flow	Test loader hydraulics for flow and pressure
	Relief valve in hydraulic cushion is not functioning	See the vibratory roller Service Manual for the correct procedure
Vibratory Roller shaft will not rotate	Loader fluid reservoir is low	Add fluid to reservoir on loader, remove relief valve and inspect O-ring condition
Does not oscillate	Improper wear plate adjustment	See the vibratory roller Operation and Maintenance Manual for the correct procedure



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SERVICE SCHEDULE

Chart

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear and early failures. The service schedule is a guide for correct maintenance of the Bobcat product.

48 In. Vibratory Roller Models			
SERVICE SCHEDULE		FREQUENCY	
ITEM	SERVICE REQUIRED	25 HOURS	ANNUALLY AND / OR 200 HOURS
Pivot Frame	Lubricate grease fittings on frame		
Eccentric Case	Change the case oil		

73 & 80 In. Vibratory Roller Models			
SERVICE SCHEDULE		FREQUENCY	
ITEM	SERVICE REQUIRED	25 HOURS	ANNUALLY AND / OR 200 HOURS
Eccentric Case	Change the case oil		
Wear Plates	Annually adjust for wear.		



AVOID INJURY OR DEATH

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.

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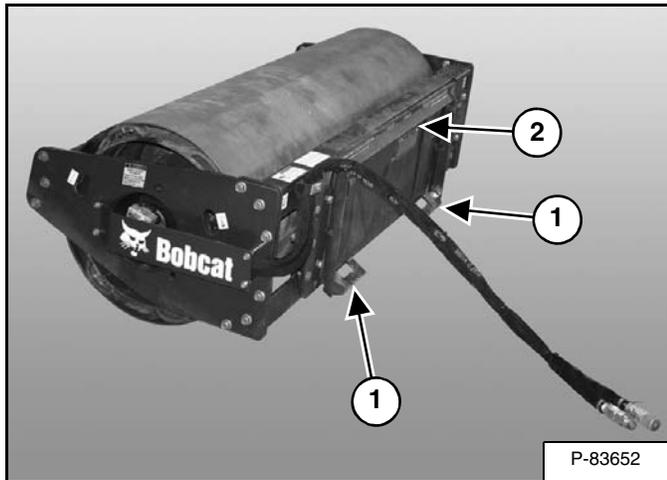


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INSPECTION

Attachment Mounting Frame

Figure 10-30-1



Inspect the Bob-Tach mounts (Item 1), mounting flange (Item 2) [Figure 10-30-1] and all welds on the vibratory roller for wear and damage each time the vibratory roller is removed from the machine.

Frequently inspect the vibratory roller to ensure that all components are secure and that all bolts and nuts are thoroughly tightened.

Bob-Tach

Hand Lever Bob-Tach

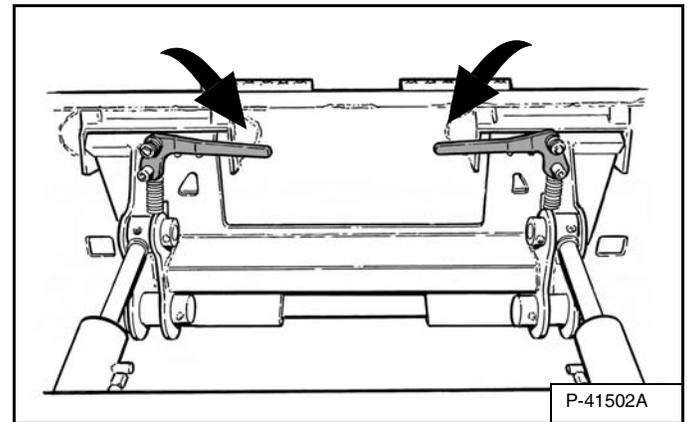


AVOID INJURY OR DEATH

The Bob-Tach wedges must extend through the holes in the attachment mounting frame. Levers must be fully down and locked. Failure to secure wedges can allow attachment to come off.

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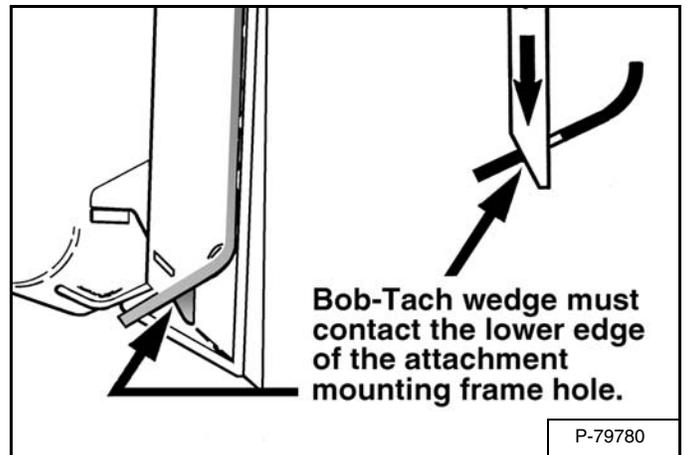
Figure 10-30-2



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 10-30-2] (wedges fully extended through the attachment mounting frame holes).

The levers and wedges must move freely [Figure 10-30-2].

Figure 10-30-3



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-30-3].

NOTE: If the wedge does not contact the lower edge of the hole, the attachment will be loose and can come off the Bob-Tach.

Inspect the mounting frame on the attachment. (See the machine's Operation & Maintenance Manual for inspecting the Bob-Tach). Replace any parts that are damaged, bent or missing. Keep all fasteners tight. Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)

INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Power Bob-Tach

! WARNING

AVOID INJURY OR DEATH

The Bob-Tach wedges must extend through the holes in the attachment mounting frame. Levers must be fully down and locked. Failure to secure wedges can allow attachment to come off.

W-2715-0208

Figure 10-30-4

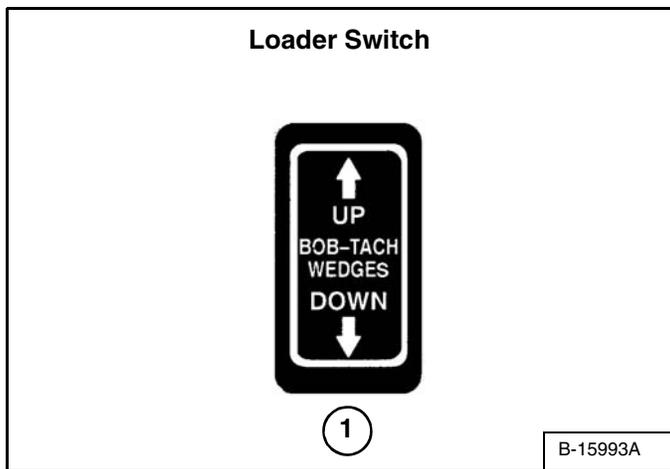
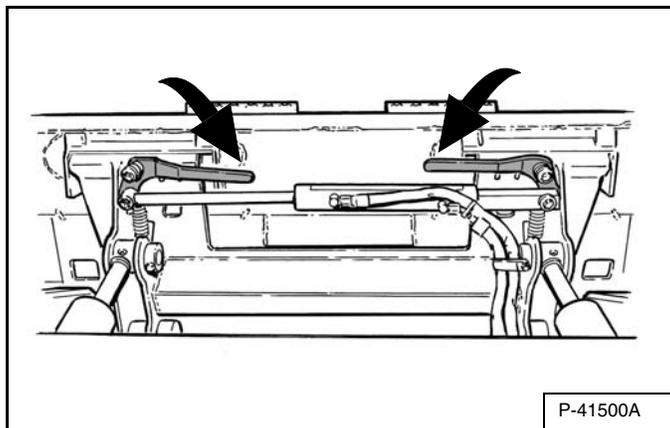
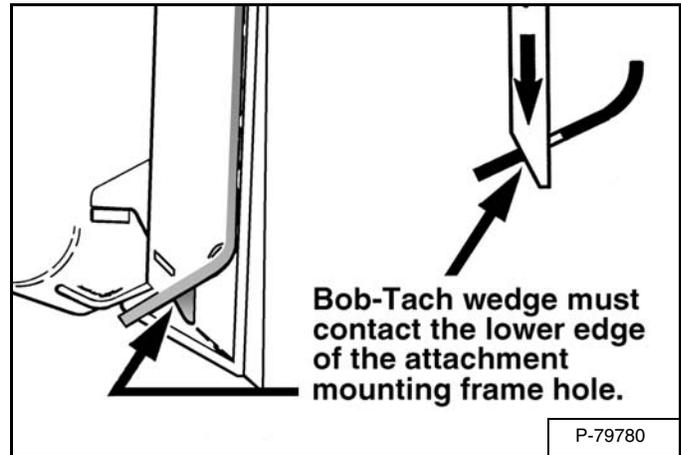


Figure 10-30-5



Push and hold the BOB-TACH “WEDGES DOWN” switch (Item 1) [Figure 10-30-4] until the levers are fully engaged in the locked position [Figure 10-30-5] (wedges fully extended through the attachment mounting frame holes).

Figure 10-30-6



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-30-6].

NOTE: If the wedge does not contact the lower edge of the hole, the attachment will be loose and can come off the Bob-Tach.

Inspect the mounting frame on the attachment. (See the machine's Operation and Maintenance Manual for inspecting the Bob-Tach). Replace any parts that are damaged, bent or missing. Keep all fasteners tight. Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)

ATTACHMENT STORAGE AND RETURN TO SERVICE

Storage

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

- Thoroughly clean the attachment.
- Lubricate the attachment.
- Inspect the Bob-Tach wedge mounts, mounting flange and all welds on the attachment for wear and damage.
- 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.
- Put all controls in neutral position.

NOTE: Do not store the vibratory roller with load binders or chains for extended periods of time on a trailer (isolators may be damaged as a result).

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

Return to Service

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

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



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REGULAR MAINTENANCE ITEMS

Eccentric Case Fluid

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.

I-2067-0499

Change the lubricant in the eccentric case annually and / or 200 hours of operation.

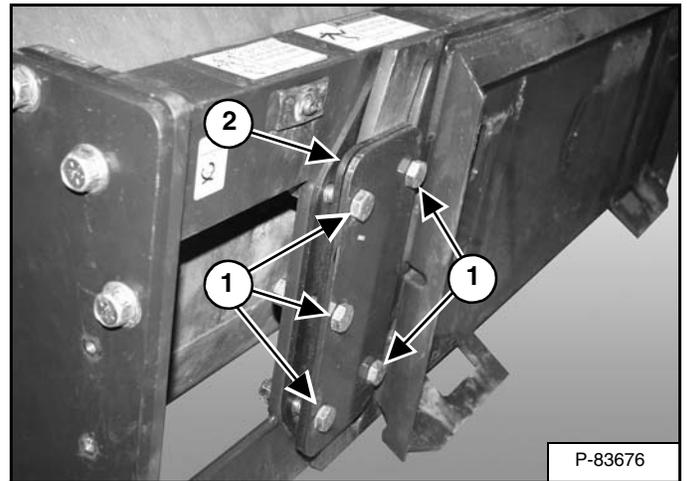
The eccentric case is a 1 pt. (473 ml) volume fill of Mobile SHC 632 lubricant. (See DRIVE SHAFT AND ECCENTRIC CASE on Page 30-60-1.)

NOTE: Substitution of any other type of lubrication WILL result in bearing failure. (See your Bobcat dealer for more information.)

Wear Plate Adjustment

73 & 80 Inch Vibratory Roller Models

Figure 10-50-1



Check the wear plates (Item 2) [Figure 10-50-1] for excessive wear or other damage.

Any wear plates showing excessive wear or other damage must be discarded and replaced. See your Bobcat dealer for.

Repeat procedure for other side.

Evenly torque the bolts and nuts (Item 1) [Figure 10-50-1] to 50 - 60 ft.-lb. (68 - 82 N•m), then back off until bolts spin freely.

Note: The gap between plate and wear plate should not exceed 0.04 in. (1,02 mm).

Repeat procedure for other side.

REGULAR MAINTENANCE ITEMS (CONT'D)

Scraper Frame and Edge Adjustment

Scraper Frame

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.

I-2067-0499

Adjusting the scraper frame position may be needed as the scraper edge wears. The edge will need to be adjusted.

Both frame and scraper edges are slotted for wear adjustment.

NOTE: The dimensions given are for reference only as ideal dimensions vary with soil types and conditions.

! 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.

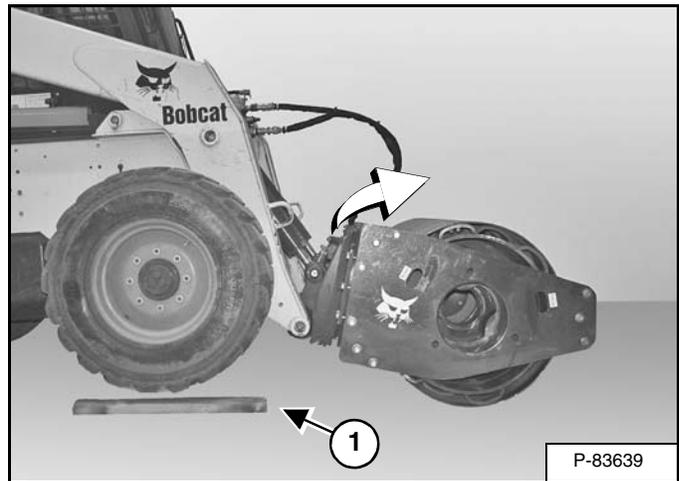
W-2019-0907

Install the vibratory roller on the machine. (See your vibratory roller Operation & Maintenance Manual for the correct procedure.)

Enter the loader and start the engine. (See your vibratory roller Operation & Maintenance Manual for the correct procedure.)

NOTE: To accommodate isolator deflection, the scraper frame adjustment is made with machine down force fully applied.

Figure 10-50-2



Fully lower the lift arms.

Fully lower the attachment completely to the ground.

Roll out the machine Bob-Tach until the front of the loader is slightly off the ground as shown in [Figure 10-50-2].

Stop the engine and exit the loader. (See your vibratory roller Operation & Maintenance Manual for the correct procedure.)

Insert a wood block under each front tire / track (Item 1) [Figure 10-50-2] on both sides.

! WARNING

Before you leave the operator's seat:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine.
- Engage the parking brake.
- Raise seat bar.
- (Foot Pedal Controls) Move pedals until both lock.
- (Advanced Control System-ACS) Move the hydraulic controls to the NEUTRAL POSITION to make sure that both lift and tilt functions are deactivated.
The seat bar system must deactivate the lift and tilt control functions when the seat bar is up. Service the system if hand controls do not deactivate.
- (Selectable Joystick Controls-SJC) Move the joysticks to the NEUTRAL POSITION to make sure that travel and hydraulic functions are deactivated.
The seat bar system must deactivate these functions when the seat bar is up. Service the system if controls do not deactivate.

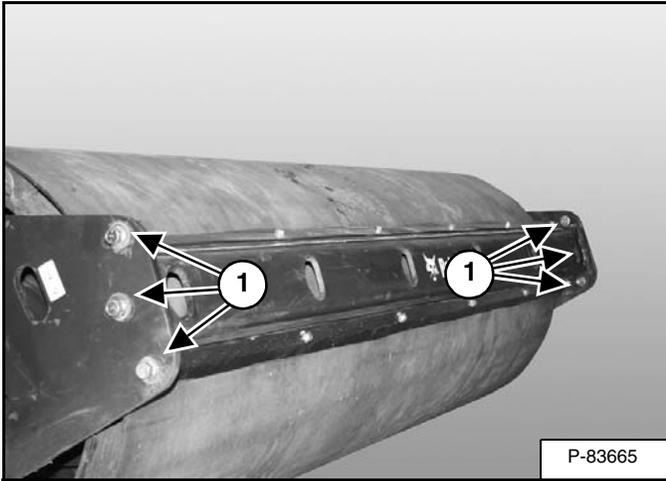
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REGULAR MAINTENANCE ITEMS (CONT'D)

Scraper Frame and Edge Adjustment (Cont'd)

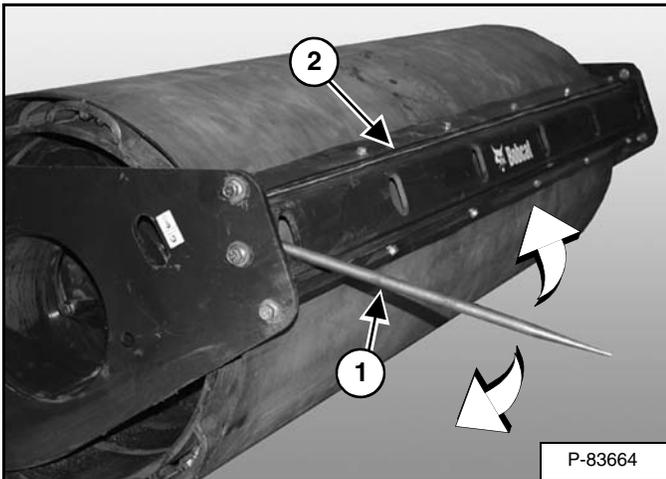
Scraper Frame (Cont'd)

Figure 10-50-3



Loosen the bolt and nuts (Item 1) [Figure 10-50-3] on both sides.

Figure 10-50-4



Insert a steel bar (Item 1) [Figure 10-50-4] into the cross frame to serve as a lever.

Move the steel bar (Item 1) up or down to adjust the cross frame (Item 2) [Figure 10-50-4] to the roller.

Figure 10-50-5

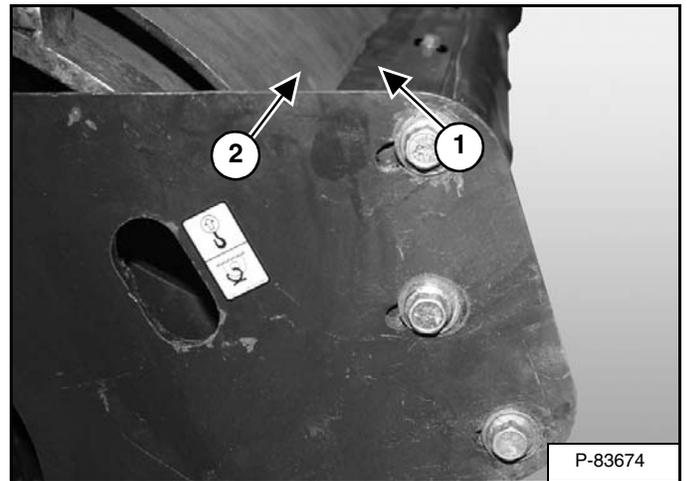
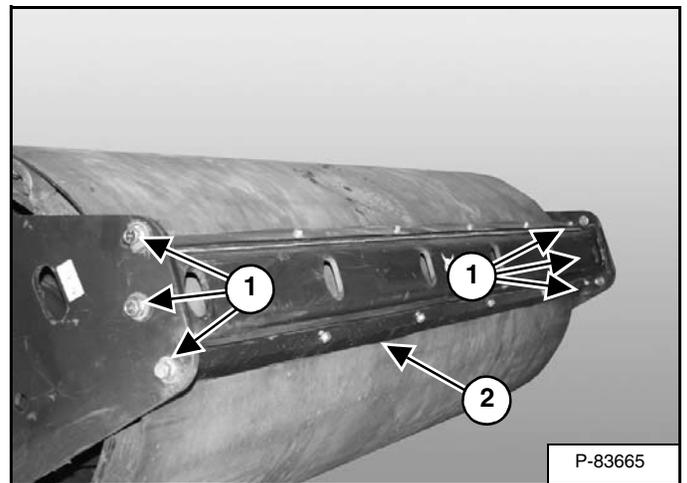


Figure 10-50-6



Adjust the cross frame so the upper scraper edge (Item 1) makes slight contact with the roller shell (Item 2) [Figure 10-50-5], while maintaining a 0.38 in. (9,5 mm) gap for the lower scraper edge (Item 2) [Figure 10-50-6].

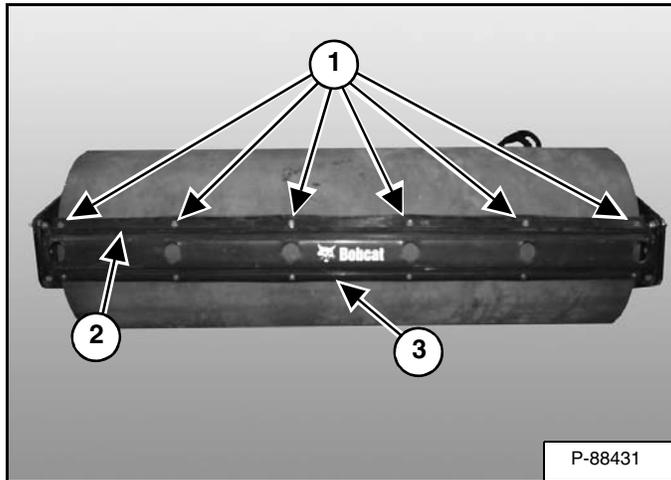
Tighten the bolts and nuts (Item 1) [Figure 10-50-6] on both sides.

REGULAR MAINTENANCE ITEMS (CONT'D)

Scraper Frame and Edge Adjustment (Cont'd)

Smooth Scraper Edge

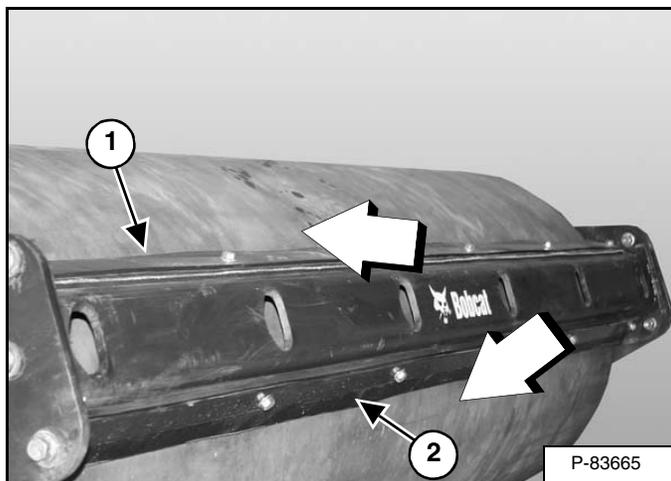
Figure 10-50-7



Loosen the bolts and nuts (Item 1) for the upper scraper edge (Item 2) [Figure 10-50-7].

Repeat for the lower scraper edge (Item 3) [Figure 10-50-7].

Figure 10-50-8

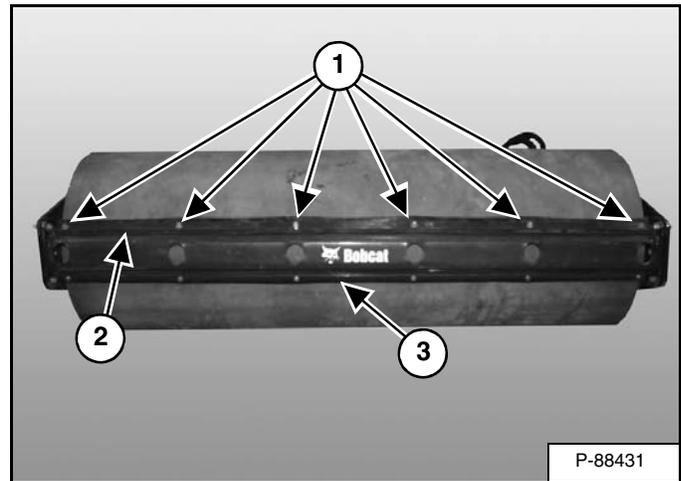


Move the rubber edge (Item 1) [Figure 10-50-8] until contact is made.

Repeat for the lower scraper edge (Item 2) [Figure 10-50-8] while maintaining a 0.38 in. (9,5 mm) gap for the lower scraper edge.

NOTE: The dimensions given are for reference only as ideal dimensions vary with soil types and conditions.

Figure 10-50-9



NOTE: Degrease all threaded holes and fasteners prior to applying Loctite®. Apply Loctite® 242 to all bolts before installation.

Tighten the bolts and nuts (Item 1) for the upper scraper edge (Item 2) [Figure 10-50-9].

Repeat for the lower scraper edge (Item 3) [Figure 10-50-9].

REGULAR MAINTENANCE ITEMS (CONT'D)

Scraper Frame and Edge Adjustment (Cont'd)

Padded Scraper Edge

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.

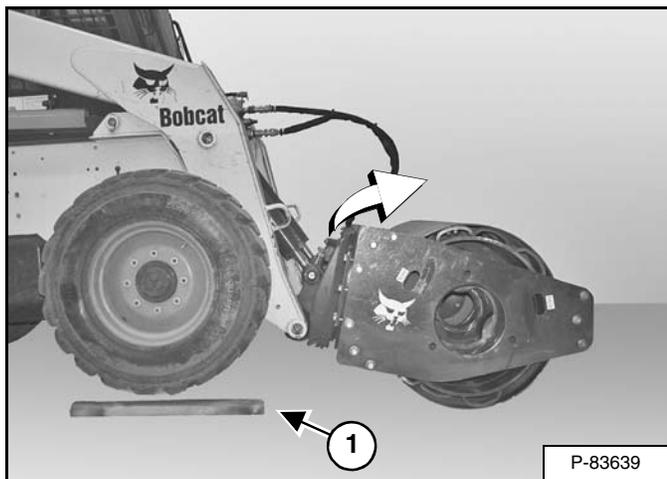
W-2019-0907

Install the vibratory roller on the machine. (See your vibratory roller Operation & Maintenance Manual for the correct procedure.)

Enter the loader and start the engine. (See your vibratory roller Operation & Maintenance Manual for the correct procedure.)

NOTE: To accommodate isolator deflection, the padded scraper edge adjustment is made with machine down force fully applied.

Figure 10-50-10



Fully lower the lift arms.

Fully lower the attachment completely to the ground.

Roll out the machine Bob-Tach until the front of the loader is slightly off the ground as shown in [Figure 10-50-10].

Stop the engine and exit the loader. (See your vibratory roller Operation & Maintenance Manual for the correct procedure.)

Insert a wood block under each front tire / track (Item 1) [Figure 10-50-10] on both sides.

WARNING

Before you leave the operator's seat:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine.
- Engage the parking brake.
- Raise seat bar.
- (Foot Pedal Controls) Move pedals until both lock.
- (Advanced Control System-ACS) Move the hydraulic controls to the **NEUTRAL POSITION** to make sure that both lift and tilt functions are deactivated.
The seat bar system must deactivate the lift and tilt control functions when the seat bar is up. Service the system if hand controls do not deactivate.
- (Selectable Joystick Controls-SJC) Move the joysticks to the **NEUTRAL POSITION** to make sure that travel and hydraulic functions are deactivated.
The seat bar system must deactivate these functions when the seat bar is up. Service the system if controls do not deactivate.

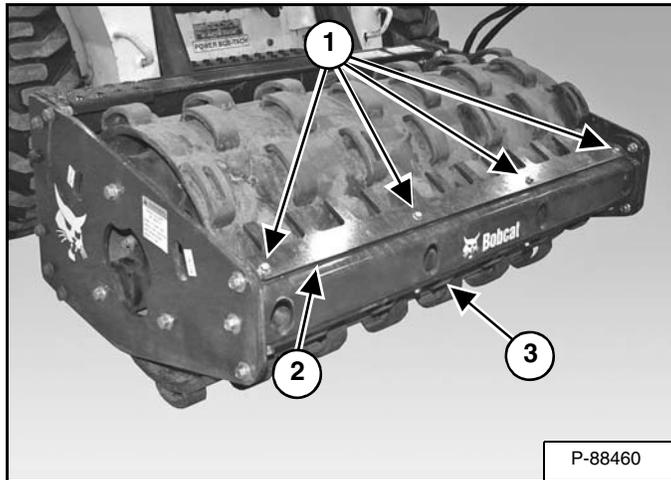
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REGULAR MAINTENANCE ITEMS (CONT'D)

Scraper Frame and Edge Adjustment (Cont'd)

Padded Scraper Edge (Cont'd)

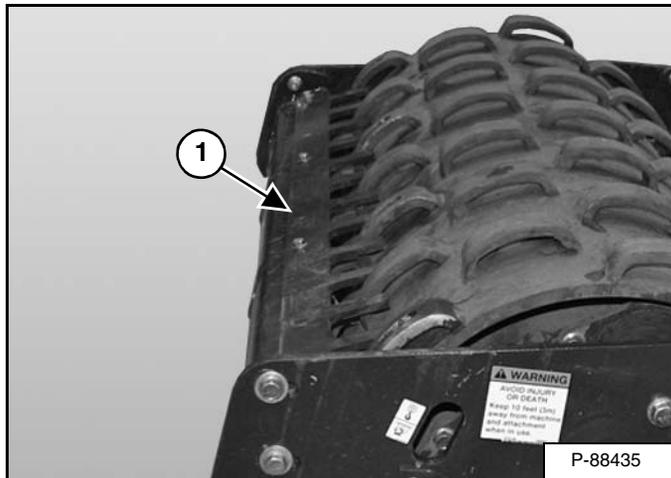
Figure 10-50-11



Loosen the bolts and nuts (Item 1) for the upper scraper edge (Item 2) [Figure 10-50-11].

Repeat for the lower scraper edge (Item 3) [Figure 10-50-11].

Figure 10-50-12

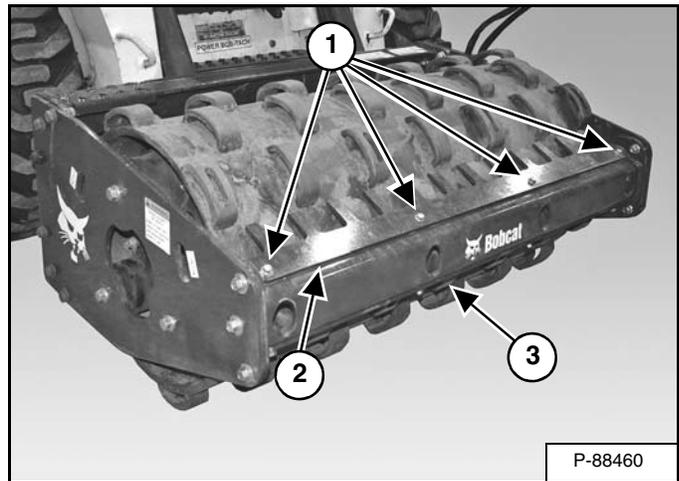


Move the scraper edge (Item 1) [Figure 10-50-12] until it is 0.63 in. (16 mm) from the roller drum.

Repeat for the lower scraper edge (Item 3) [Figure 10-50-11].

NOTE: The dimensions given are for reference only as ideal dimensions vary with soil types and conditions.

Figure 10-50-13



Tighten the bolts and nuts (Item 1) for the upper scraper edge (Item 2) [Figure 10-50-13].

Repeat for the lower scraper edge (Item 3) [Figure 10-50-13].

NOTE: Scraper contact with the drum will lead to premature scraper wear, excessive noise and transmission of vibration to loader and operator should be avoided.

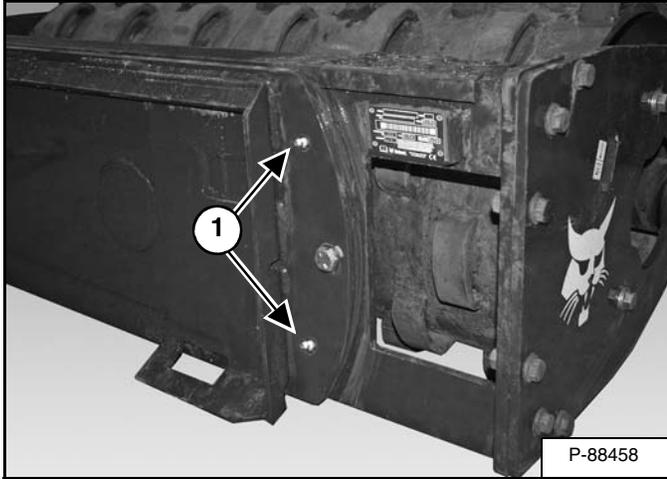
LUBRICATING THE ATTACHMENT

Lubrication Locations

48 Inch Vibratory Roller Models

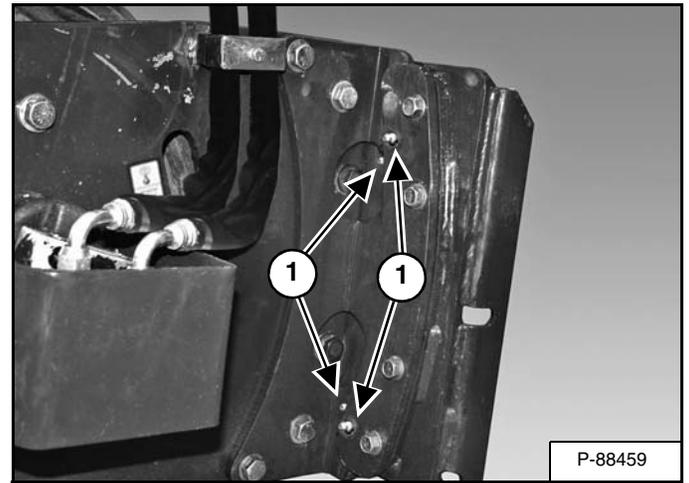
For grease lubrication intervals. (See SERVICE SCHEDULE on Page 10-20-1.)

Figure 10-60-1



Apply lubricant to the grease fittings (Item 1) [Figure 10-60-1] until it shows.

Figure 10-60-2



Apply lubricant to the grease fittings (Item 1) [Figure 10-60-2] until it shows.

Product: 2009 Bobcat Roller 48 Padded/Smooth, Roller 73 Padded/Smooth, Roller 80 Smooth Vibratory Roller Service Repair W
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