

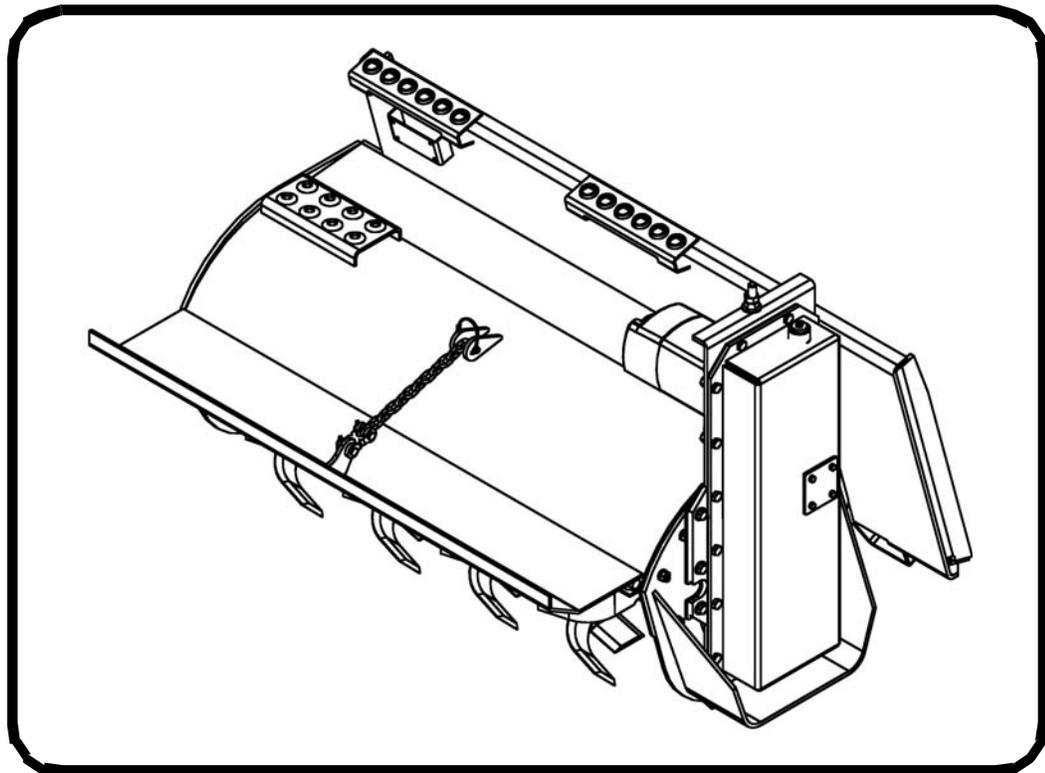


Bobcat®

Service Manual

38 Inch Tiller

(TILLER 38) - S/N 614400101 & Above



Product: 2008 Bobcat 38 Inch Tiller Service Repair Workshop Manual
Full Download: <https://www.arepairmanual.com/downloads/2008-bobcat-38-inch-tiller-service-repair-workshop-manual/>

Sample of manual. Download All 54 pages at:
<https://www.arepairmanual.com/downloads/2008-bobcat-38-inch-tiller-service-repair-workshop-manual/>

MAINTENANCE SAFETY



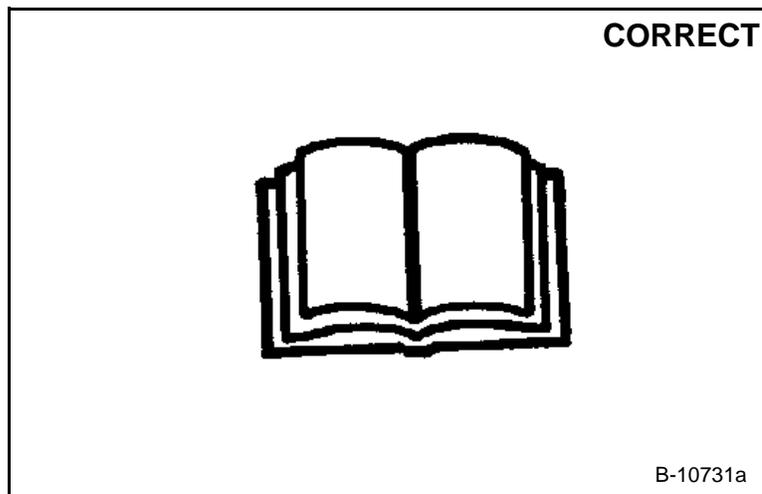
WARNING

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-2003-0903



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.



Bobcat®

ALPHABETICAL INDEX

ATTACHMENT STORAGE AND RETURN TO SERVICE .	10-50-1
DELIVERY REPORT	III
DRIVE CHAIN	30-10-1
HYDRAULIC MOTOR	20-10-1
IDENTIFICATION AND MACHINE SIGNS (DECALS)	IV
INSPECTION.	10-20-1
REGULAR MAINTENANCE ITEMS	10-30-1
REMOVAL AND INSTALLATION OF TINES	10-40-1
SERIAL NUMBER LOCATION	III
(TILLER 38) SPECIFICATIONS.	SPEC-10-1
TINE SHAFT BEARINGS AND SEALS	30-20-1
TORQUE SPECIFICATIONS FOR BOLTS	SPEC-20-1
TROUBLESHOOTING.	10-10-1



Bobcat®

CONTENTS

**PREVENTIVE
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**MAIN
FRAME**

**SPECIFICATIONS
AND
SCHEMATICS**

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

REFERENCE INFORMATION

Write the correct information for YOUR 38 inch tiller attachment in the spaces below.
Always use these numbers when referring to your 38 inch tiller.

38 Inch Tiller Serial Number

NOTES:

YOUR BOBCAT® DEALER:

ADDRESS:

PHONE:

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

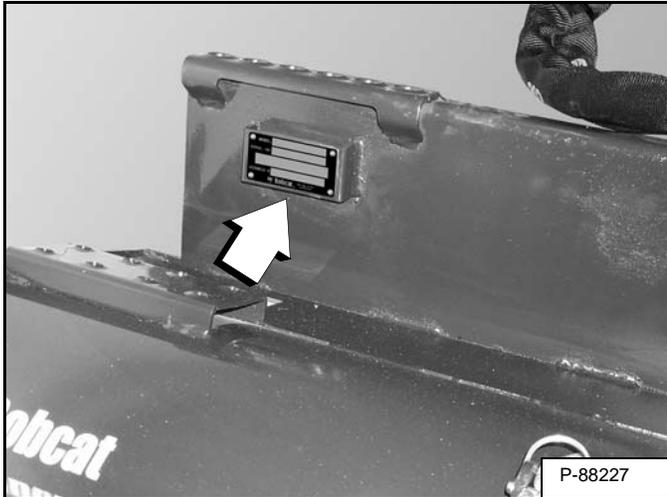
Bobcat Company Europe
Drève Richelle 167
B-1410 WATERLOO
Belgium



Bobcat®

SERIAL NUMBER LOCATION

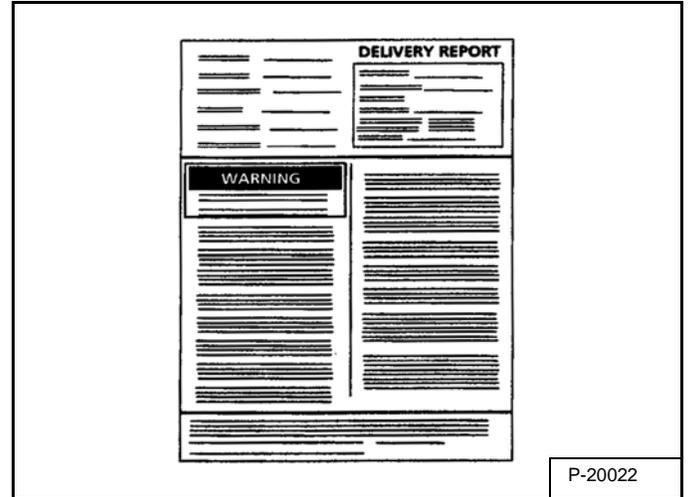
Figure 1



Always use the serial number of the 38 inch tiller 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 [Figure 1].

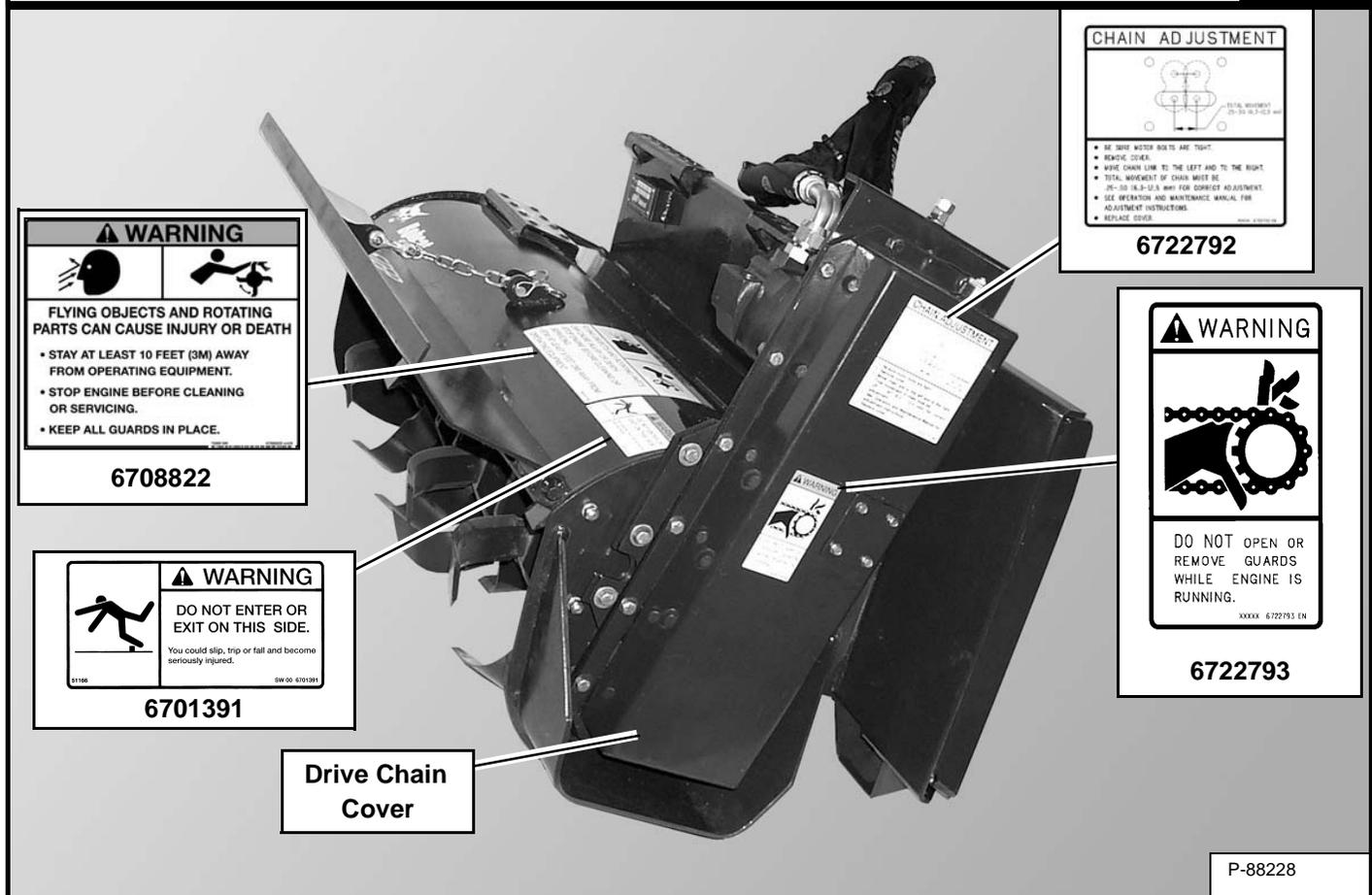
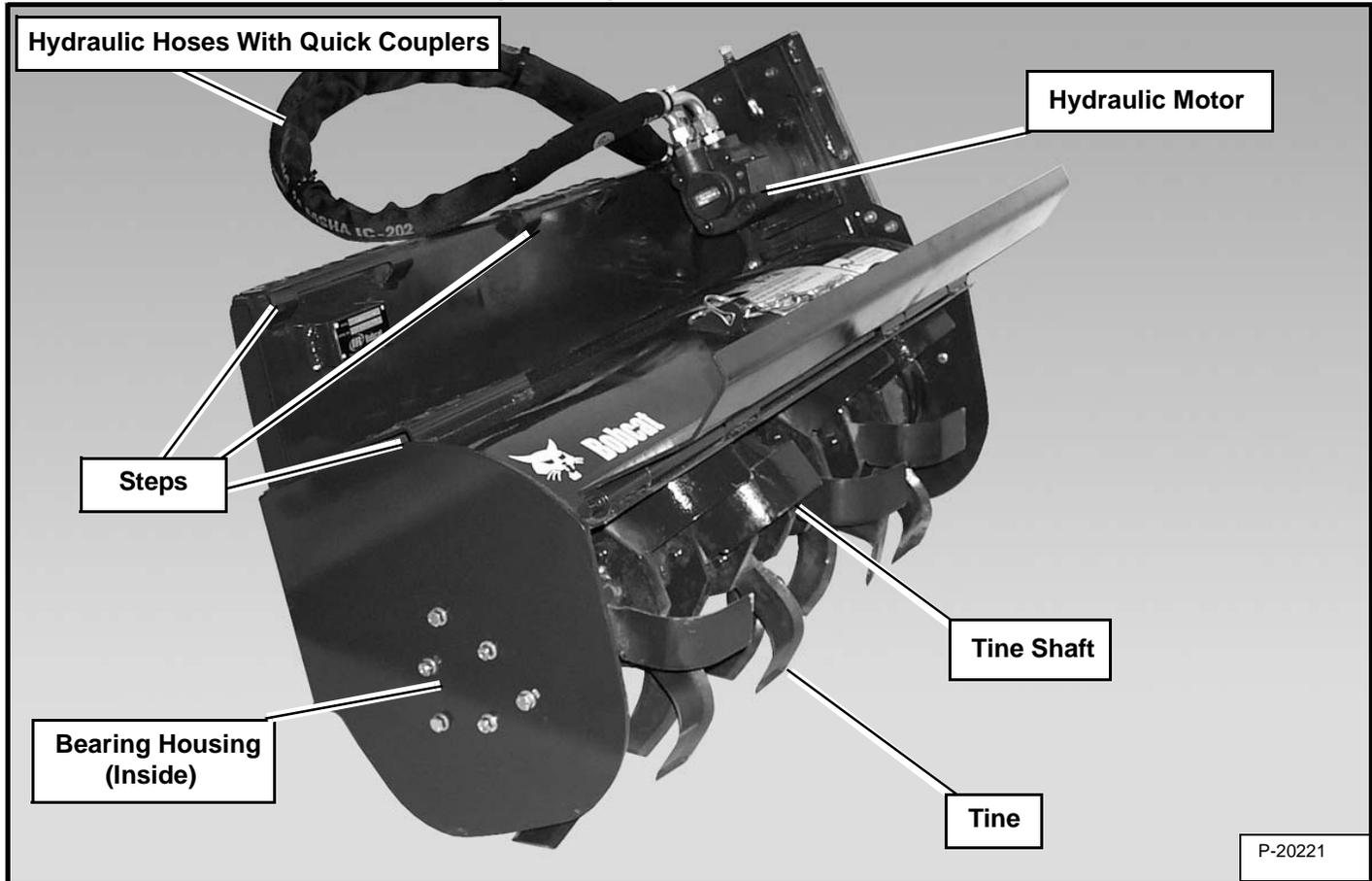
DELIVERY REPORT

Figure 2



The delivery report must be filled out by the dealer and signed by the owner or operator when the 38 inch tiller 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)



PREVENTIVE MAINTENANCE

ATTACHMENT STORAGE AND RETURN TO SERVICE . . . 10-50-1
 Return to Service 10-50-1
 Storage 10-50-1

INSPECTION 10-20-1
 Attachment Mounting Frame 10-20-1
 Bob-Tach 10-20-1

REGULAR MAINTENANCE ITEMS 10-30-1
 300 Hour Inspection. 10-30-1
 Adjusting the Drive Chain 10-30-1

REMOVAL AND INSTALLATION OF TINES. 10-40-1
 Procedure 10-40-1

TROUBLESHOOTING 10-10-1
 Chart 10-10-1



Bobcat®

TROUBLESHOOTING

Chart

PROBLEM	CAUSE	CORRECTION
Tiller does not mount properly on the Bob-Tach.	Bob-Tach wedges are not fully retracted before installation.	Retract Bob-Tach wedges before installation.
	Mud, dirt or stones are lodged between the Bob-Tach and the tiller mount.	Remove debris between Bob-Tach and tiller mount.
Tiller tines do not rotate.	No hydraulic flow.	Activate loader front auxiliary hydraulics.
		Check quick couplers connection. Check for damaged hose ends and fittings.
Tiller is performing poorly.	Tines may be worn.	Replace tines as needed.

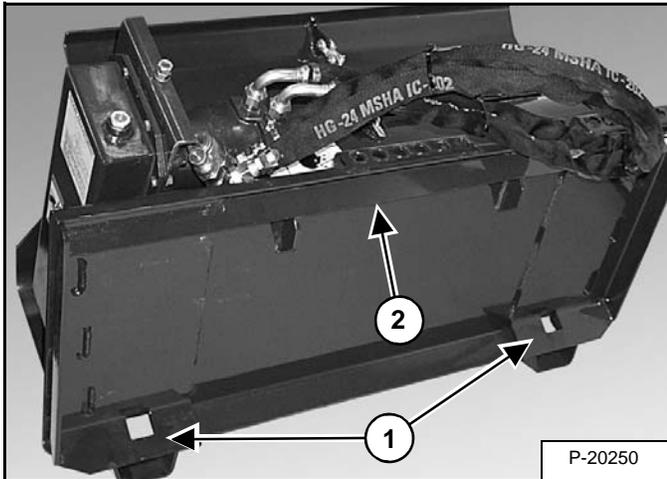


Bobcat®

INSPECTION

Attachment Mounting Frame

Figure 10-20-1



Inspect the Bob-Tach wedge mounts (Item 1), mounting flange (Item 2) [Figure 10-20-1] and all welds on the 38 inch tiller for wear and damage each time the 38 inch tiller is removed from the machine.

Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Bob-Tach

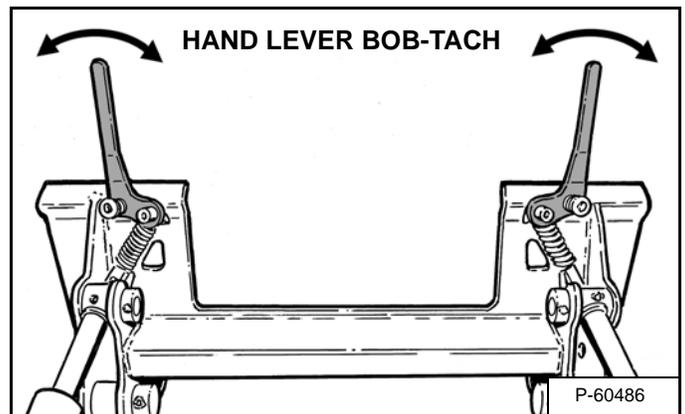
Hand Lever Bob-Tach



Bob-Tach wedges must extend through the holes in attachment. Lever(s) must be fully down and locked. Failure to secure wedges can allow attachment to come off and cause injury or death.

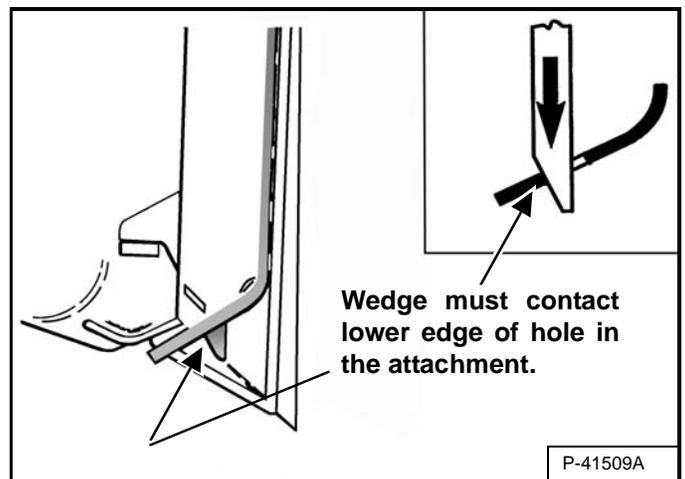
W-2102-0497

Figure 10-20-2



Move the Bob-Tach levers to engage and disengage the wedges [Figure 10-20-2]. The levers and wedges must move freely.

Figure 10-20-3



The wedges must extend through the holes in the attachment mounting frame [Figure 10-20-3].

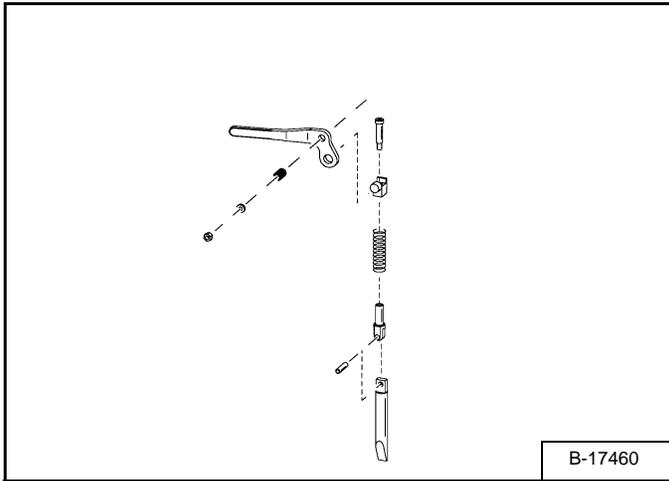
If the wedge does not contact the lower edge of the hole [Figure 10-20-3], the attachment will be loose and can come off the Bob-Tach.

INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Hand Lever Bob-Tach (Cont'd)

Figure 10-20-4



Inspect the mounting frame on the attachment and the Bob-Tach, linkages and wedges for excessive wear or damage [Figure 10-20-4]. 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 correct machine's Operation & Maintenance Manual for lubrication procedure.)

Power Bob-Tach

! WARNING

Bob-Tach wedges must extend through the holes in attachment. Lever(s) must be fully down and locked. Failure to secure wedges can allow attachment to come off and cause injury or death.

W-2102-0497

Figure 10-20-5

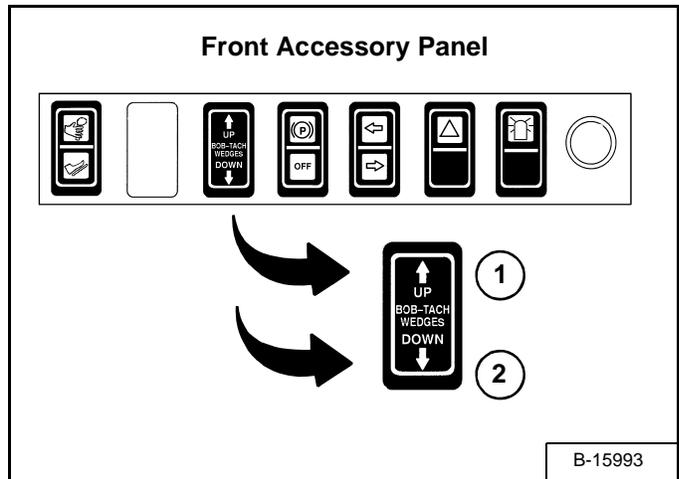
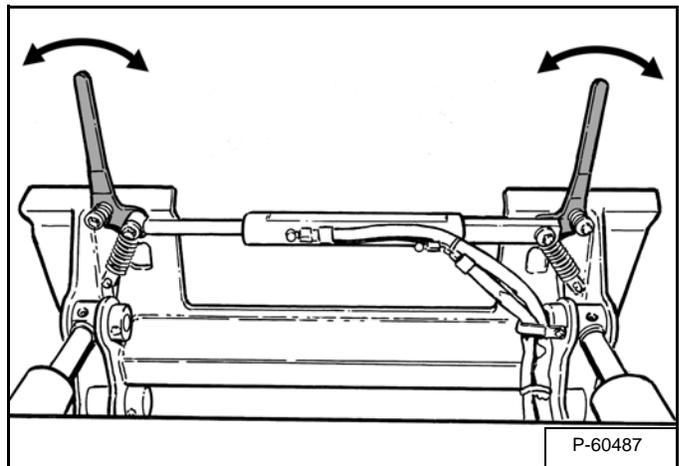


Figure 10-20-6



Push and hold the BOB-TACH WEDGES UP switch (Item 1) until the wedges are fully raised. Push and hold the BOB-TACH WEDGES DOWN switch (Item 2) [Figure 10-20-5] until the wedges are fully lowered.

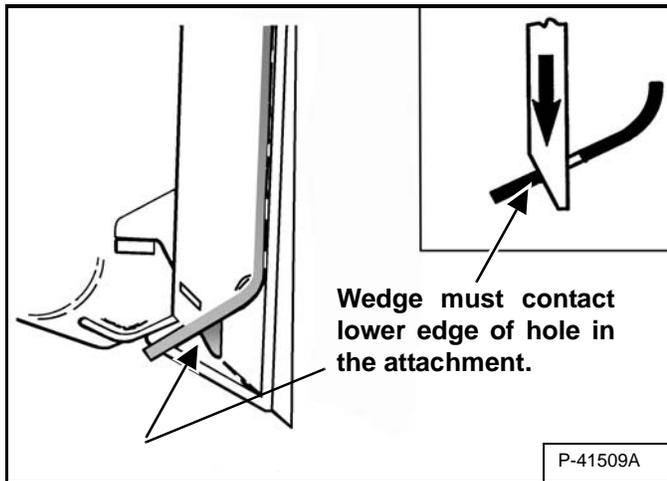
The levers and wedges must move freely [Figure 10-20-6].

INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Power Bob-Tach (Cont'd)

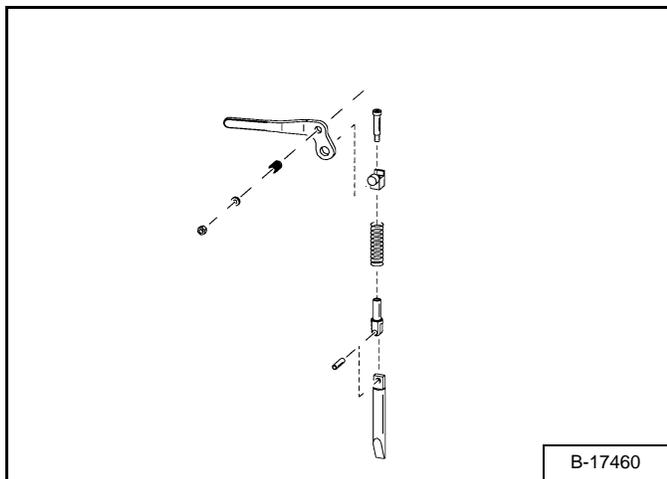
Figure 10-20-7



The wedges must extend through the holes in the attachment mounting frame **[Figure 10-20-7]**.

If the wedge does not contact the lower edge of the hole **[Figure 10-20-7]**, the attachment will be loose and can come off the Bob-Tach.

Figure 10-20-8



Inspect the mounting frame on the attachment and the Bob-Tach, linkages and wedges for excessive wear or damage **[Figure 10-20-8]**. 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 correct machine's Operation & Maintenance Manual for lubrication procedure.)



Bobcat®

REGULAR MAINTENANCE ITEMS

300 Hour Inspection

! WARNING

AVOID INJURY OR DEATH

Never operate with covers or guards removed.

W-2121-0788

Put the tiller on the ground so the chaincase cover is level with the ground.

Figure 10-30-1

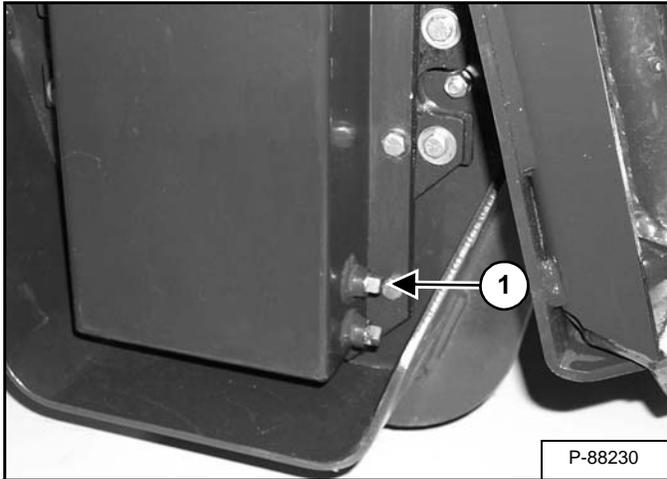
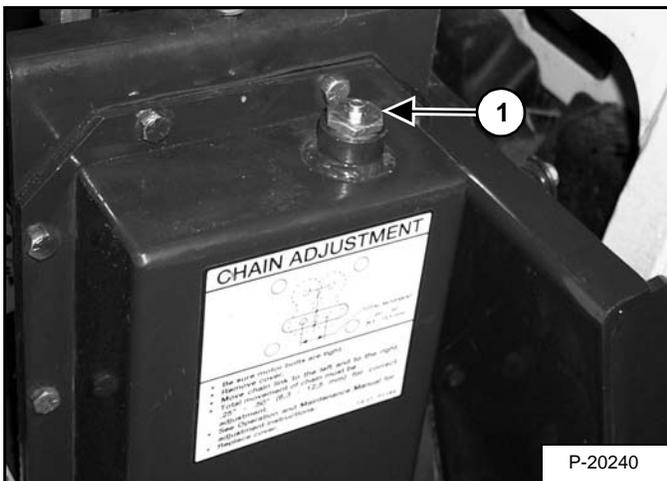


Figure 10-30-2



Remove the check plug (Item 1) [Figure 10-30-1] to check gear lube level. If the gear lube does not come out the check plug hole, remove the breather (Item 1) [Figure 10-30-2] and add 90W gear lube until it comes out the check plug hole.

Install and tighten the check plug and breather.

Adjusting the Drive Chain

! 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

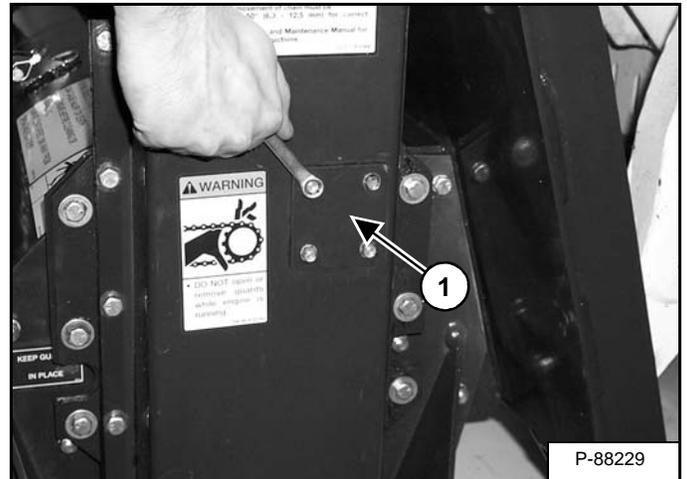
! WARNING

AVOID INJURY OR DEATH

- Keep bystanders away.
- No riders.
- Stop engine before servicing.
- Keep hands and feet away from moving parts.

W-2702-1207

Figure 10-30-3



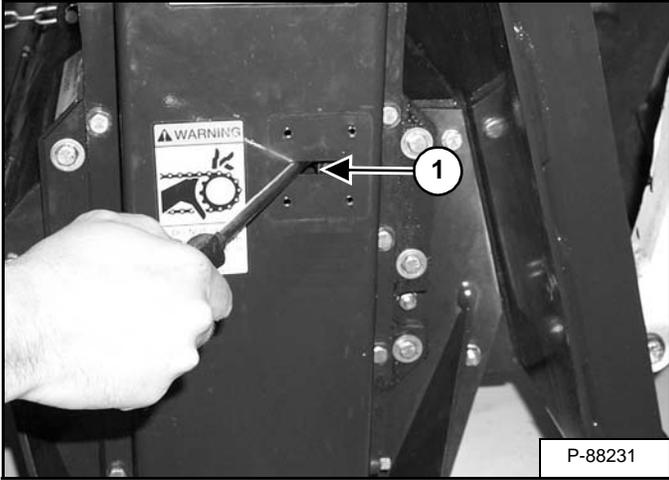
Adjust the drive chain when the chain movement is greater than correct tension of 1/4 - 1/2" (6,4 - 12,7 mm) total movement at the center of the chain.

Remove the plate (Item 1) [Figure 10-30-3] from the drive chain cover.

REGULAR MAINTENANCE ITEMS (CON'T)

Adjusting The Drive Chain (Cont'd)

Figure 10-30-4



Check the total movement of the drive chain as follows:

Use a screwdriver to pull the chain to one side and note the position through the slot (Item 1) [Figure 10-30-4].

Pull the chain to the opposite side and again note the position through the slot (Item 1) [Figure 10-30-4].

The correct tension is 1/4 - 1/2" (6,4 - 12,7 mm) total movement at the center of the chain.

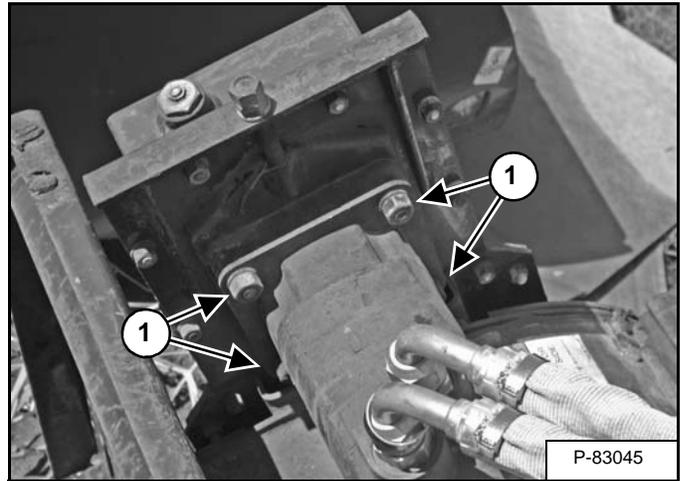
CHAIN ADJUSTMENT

TOTAL MOVEMENT
.25-.50 (6,3-12,5 mm)

- BE SURE MOTOR BOLTS ARE TIGHT.
- REMOVE COVER.
- MOVE CHAIN LINK TO THE LEFT AND TO THE RIGHT.
- TOTAL MOVEMENT OF CHAIN MUST BE .25-.50 (6,3-12,5 mm) FOR CORRECT ADJUSTMENT.
- SEE OPERATION AND MAINTENANCE MANUAL FOR ADJUSTMENT INSTRUCTIONS.
- REPLACE COVER.

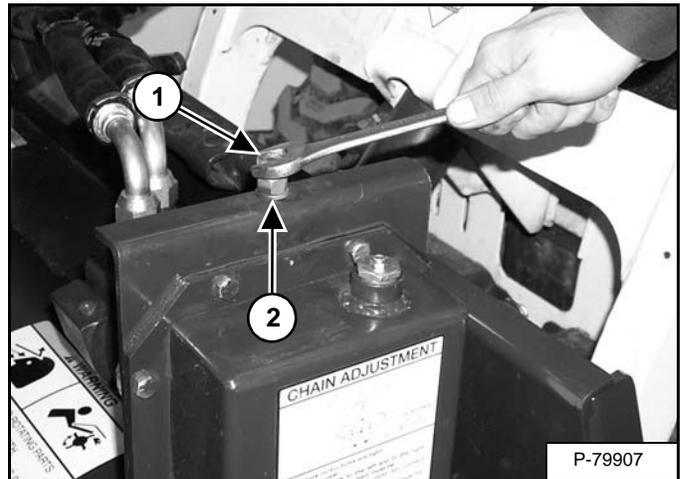
XXXXX 6722792 EN

Figure 10-30-5



Loosen the four hydraulic motor nuts (Item 1) [Figure 10-30-5]. The nuts are located on the motor side of the mounting flange.

Figure 10-30-6



Loosen the lock nut (Item 1) and turn the adjustment nut (Item 2) [Figure 10-30-6] to tighten the drive chain to the correct tension.

Installation: Tighten the hydraulic motor nuts to 65-70 ft.-lb. (88-95 N•m) torque.

Check the chain tension again.

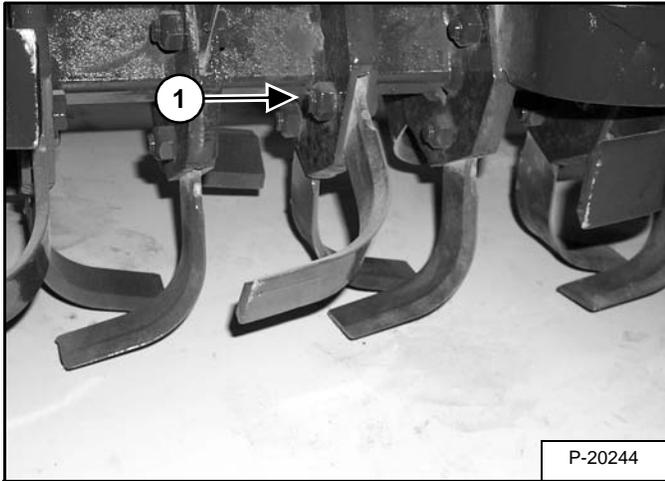
Install the plate on the drive chain cover.

NOTE: Overtightening the chain will cause excessive wear to the chain and sprockets.

REMOVAL AND INSTALLATION OF TINES

Procedure

Figure 10-40-1



The tiller tines can be replaced.

Remove the bolt and nut (Item 1) **[Figure 10-40-1]**.

Remove the tine.

Install new tines as needed.

Installation: Tighten the bolt and nut to 65-70 ft.-lb. (88-95 N•m) torque. Make sure the tine is still free to move.



Bobcat®

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 and wash the attachment.
- Check for damaged or missing decals. Replace if necessary.
- Check for loose hardware, missing or damaged parts.
- Replace worn or damaged parts.
- Lubricate the attachment.
- Place the attachment on flat ground in a dry protected shelter.

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.

- Check for damaged or missing decals. Replace if necessary.
- Check for loose hardware, missing or damaged parts.
- Replace worn or damaged parts.
- Lubricate the attachment.
- Check oil level in the chain case.



Bobcat®

HYDRAULIC SYSTEM

HYDRAULIC MOTOR	20-10-1
Assembly	20-10-8
Disassembly	20-10-5
Parts Identification	20-10-4
Removal And Installation	20-10-1

**HYDRAULIC
SYSTEM**



Bobcat®

HYDRAULIC MOTOR

Removal And Installation

IMPORTANT

When repairing hydrostatic and hydraulic systems, clean the work area before disassembly and keep all parts clean. Always use caps and plugs on hoses, tubelines and ports to keep dirt out. Dirt can quickly damage the system.

I-2003-0888

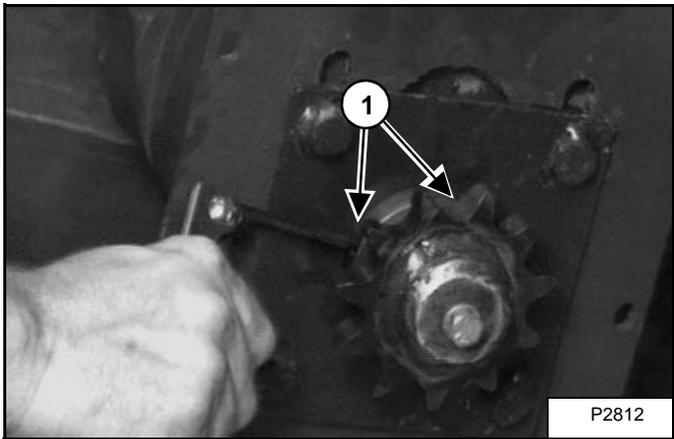
IMPORTANT

Contain and dispose of any oil leakage in an environmentally safe manner.

I-2066-0395

Remove the cover and drive chain. (See DRIVE CHAIN on page 30-10-1.)

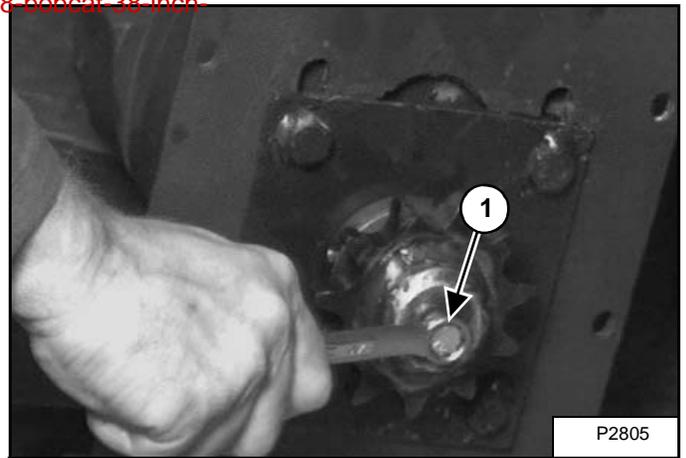
Figure 20-10-1



Loosen the two set screws (Item 1) [Figure 20-10-1] on the chain sprocket.

Installation: Tighten the two set screws.

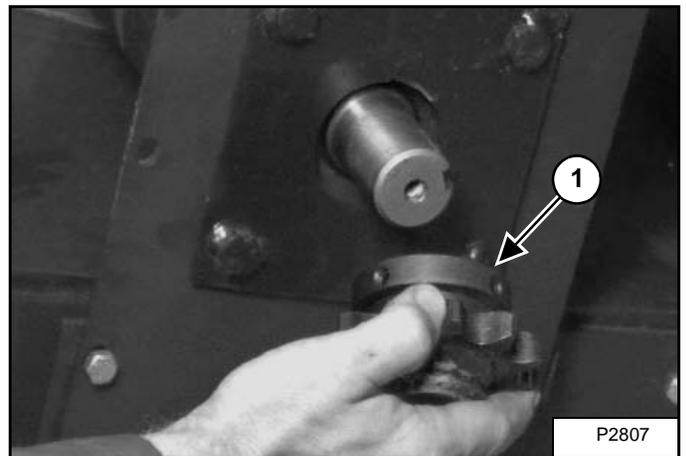
Figure 20-10-2



Remove the sprocket bolt (Item 1) [Figure 20-10-2].

Installation: Tighten bolt to 25-26 ft.-lb. (34-38 N•m) torque.

Figure 20-10-3



Remove the chain sprocket (Item 1) [Figure 20-10-3] and key.

Installation: Place key into shaft keyway. Align chain sprocket keyway, slide chain sprocket onto hydraulic motor shaft.