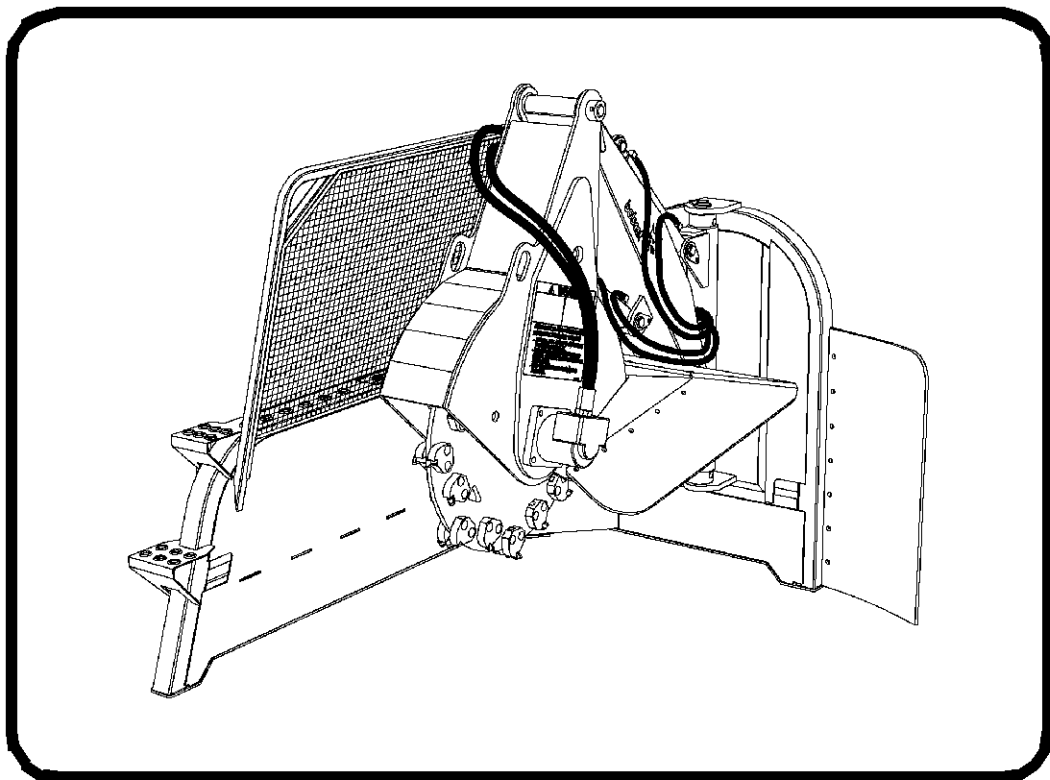




Bobcat®

Service Manual Stump Grinder

(SG30) S/N 005600101 & Above
(SG60) S/N 233000101 & Above
(SGX60) S/N A00700101 & Above



MAINTENANCE SAFETY



WARNING

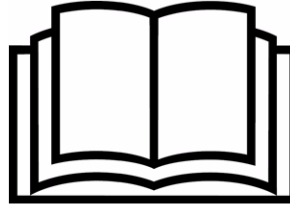
Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after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

CORRECT



P-90216

-  **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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Attachment Serial Number 1-7

DELIVERY REPORT 1-7

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SERIAL NUMBER LOCATION

Attachment Serial Number

Always use the serial number of the Stump Grinder 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

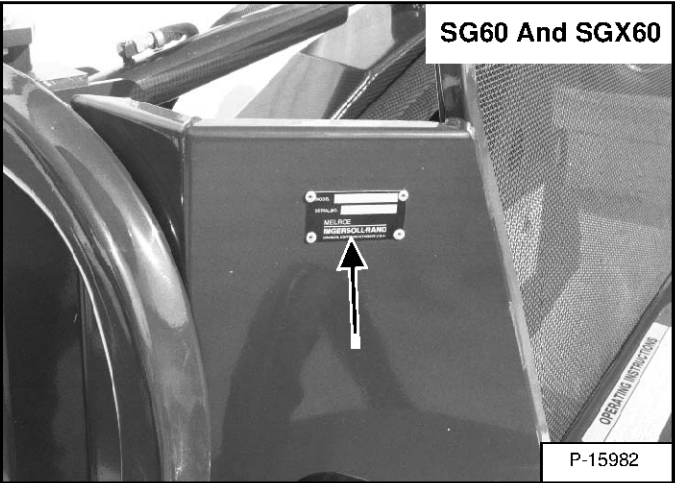
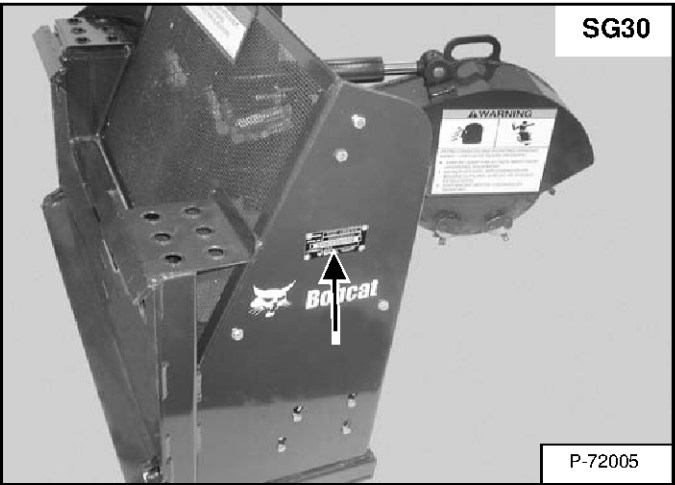


Figure 2



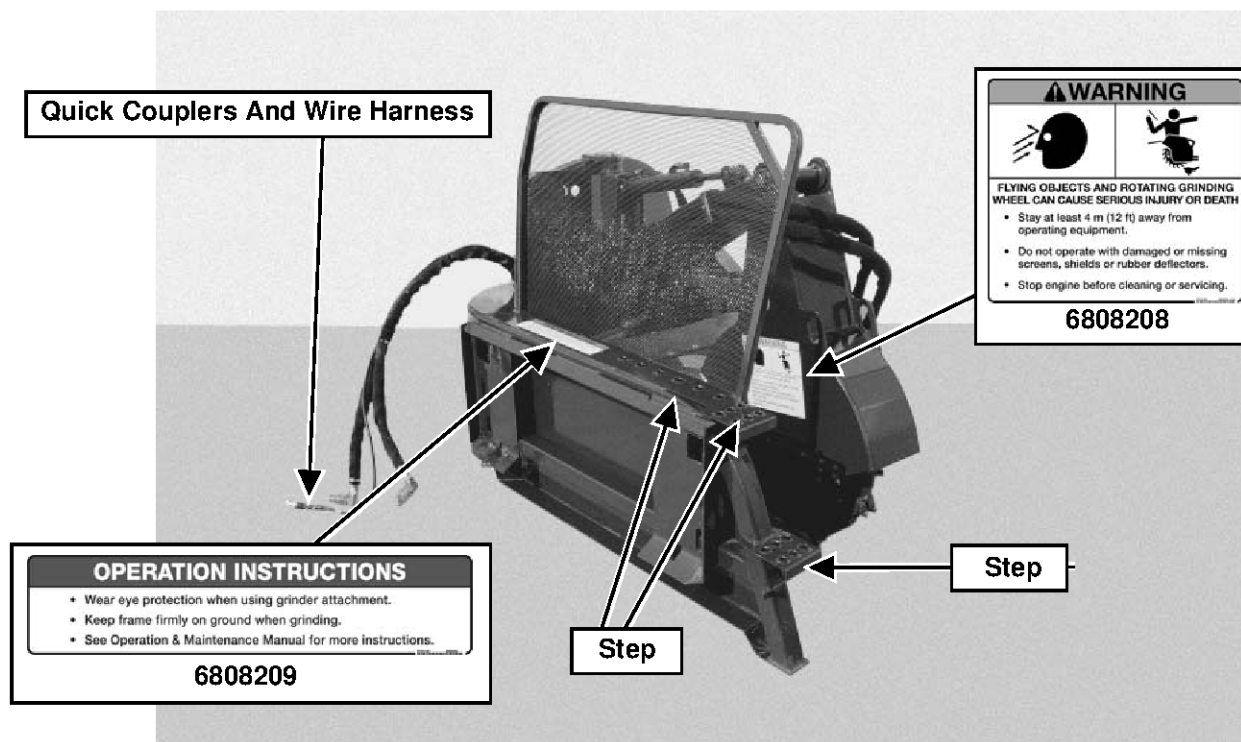
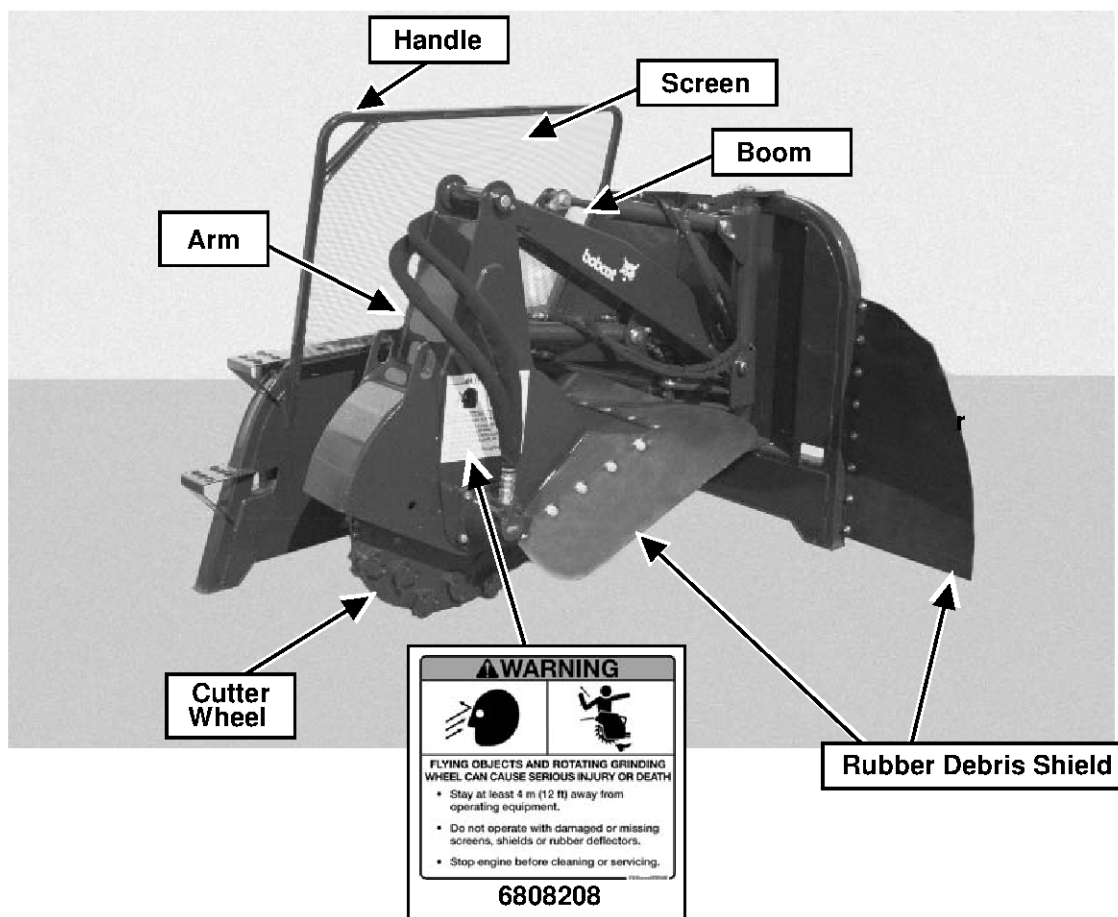
DELIVERY REPORT

Figure 3

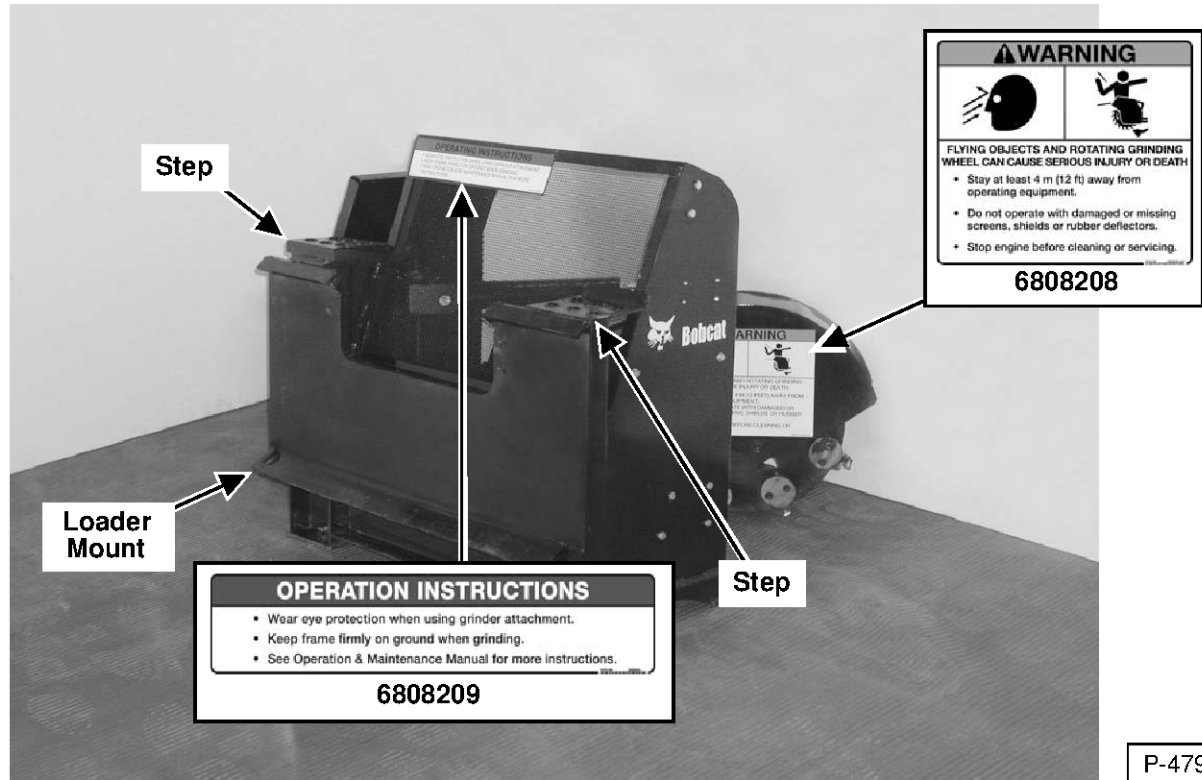
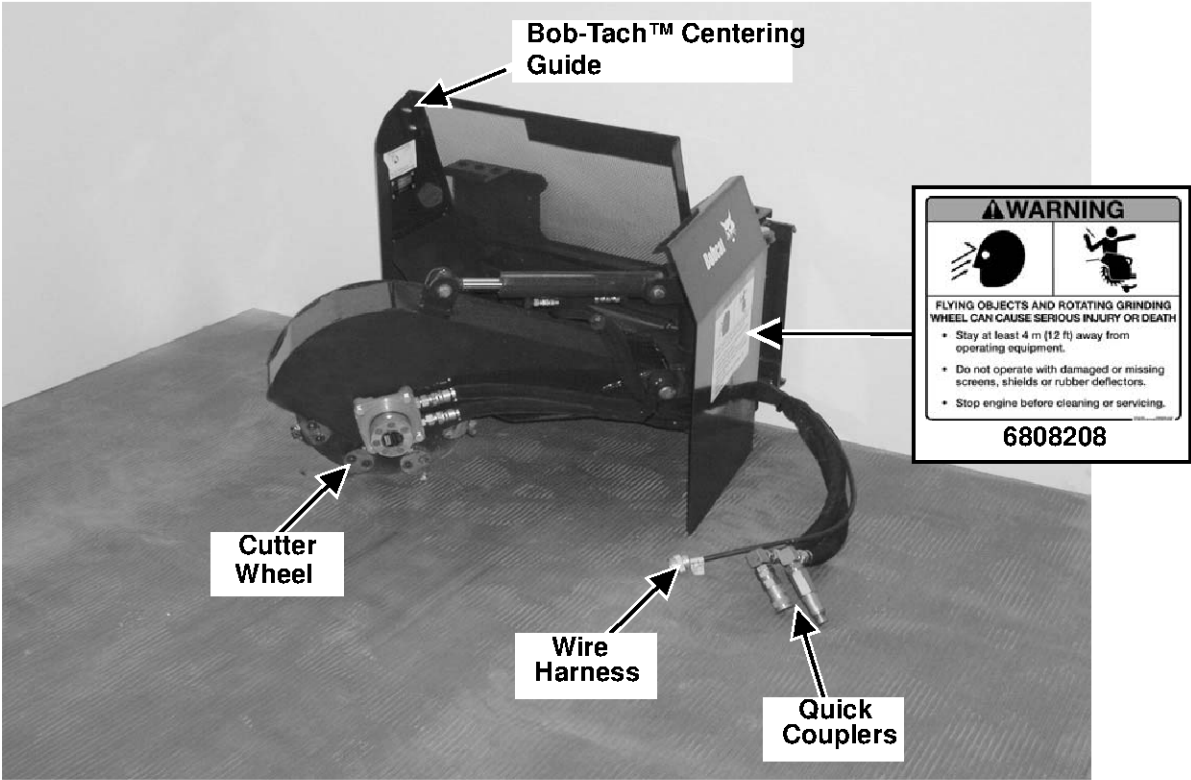
A diagram of a 'DELIVERY REPORT' form. The form is divided into several sections. At the top right is the title 'DELIVERY REPORT'. Below it is a section labeled 'WARNING' with a large exclamation mark icon. The rest of the form consists of multiple horizontal lines for text entry. The code 'P-20022' is located in the bottom right corner of the form area.

The delivery report [Figure 3] must be completed by the dealer and signed by the owner or operator when the Bobcat chipper is delivered. An explanation of the form must be given to the owner.

ATTACHMENT IDENTIFICATION (SG60 AND SGX60)



P-15984
P-15981



P-47912
P-47913



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SAFETY & MAINTENANCE

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TROUBLESHOOTING

Chart



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

If the stump grinder is not working correctly, check the hydraulic system of the machine thoroughly before making any repairs on the stump grinder. Stump grinder problems can be affected by a hydraulic system that is not operating to specifications. Connect a flow meter to the machine to check the hydraulic pump output, relief valve setting and tube lines to check flow and pressure. (See the machine's Service Manual for the correct procedure to connect the flow meter.)

Use the following troubleshooting chart to locate and correct problems which most often occur with the stump grinder.

PROBLEM	CAUSE	CORRECTION
Stump grinder cut is inadequate.	Cutting teeth worn or missing.	Replace the cutting teeth.
Noisy motor (with load).	Vibration; loose bolts.	Check torque.
Noisy motor (with no load).	Humming; worn bearings.	Replace bearings.
External oil leaks.	Motor case pressure too high.	Check the quick couplers.
	Damaged O-rings.	Replace O-rings as needed.
Loaded motor does not turn at normal speed.	Not enough hydraulic flow.	Check pump flow and rotation speed.
	Internal leaks.	Check cylinders and valve block assembly. Check motor.
Cutter motor does not rotate.	Front auxiliary hydraulics not engaged.	Engage the loader front auxiliary.
	Couplers are reversed.	Switch couplers.
	Excessive hydraulic leakage.	Check hoses and valve block.
	Hydraulic leaks.	Check cylinders and valve block assembly. Check pump drive and pump inlet.
	No hydraulic flow.	Check valves for damage or corrosion.
Cutter wheel hops.	Cutting teeth worn or missing.	Replace the cutting teeth.
	Cutting teeth setting wrong.	Reset cutting teeth.
Cutter wheel stalls.	Relief valve for boom swing cylinder set too high.	Replace relief valve.
	Cutting depth too deep.	Raise boom.
	Plug orifice blocked.	Check hydraulic lines and valve.
Swing cylinder stalls.	Relief pressure set too low.	Replace relief valve.
Relief valve chatters.	Relief pressure set too low.	Replace relief valve.



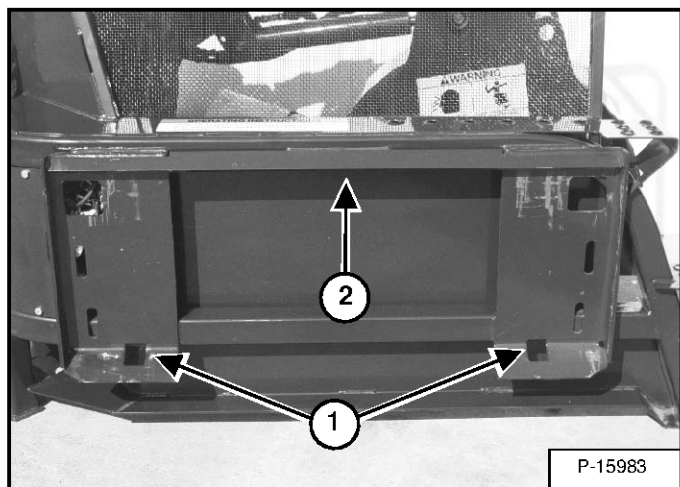
Bobcat®

DAILY INSPECTION

Attachment Mounting Frame

SG60 And SGX60

Figure 10-20-1

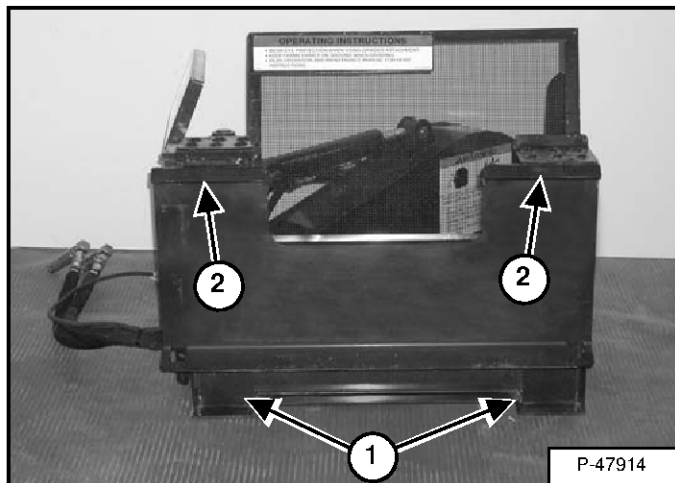


Inspect the Bob-Tach wedge mounts (Item 1), mounting flange (Item 2) [Figure 10-20-1] and all welds on the stump grinder for wear and damage each time the stump grinder is removed from the loader.

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

SG30

Figure 10-20-2



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

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

DAILY INSPECTION (CONT'D)

Bob-Tach

Hand Lever Bob-Tach

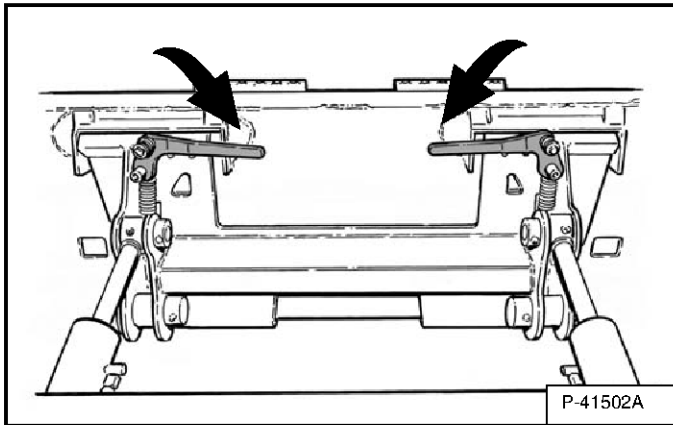
! WARNING

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

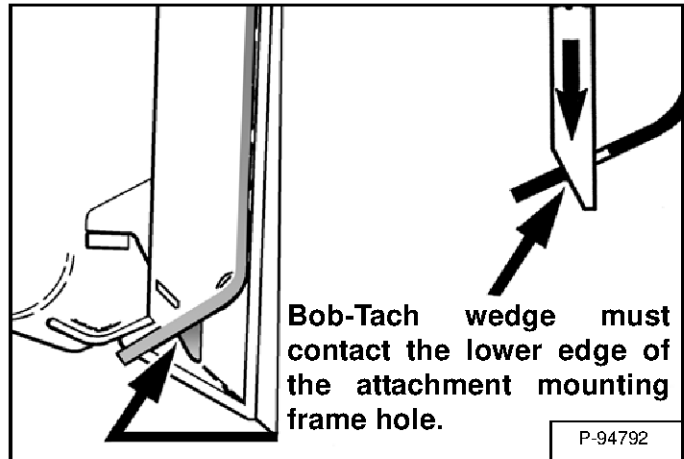
Figure 10-20-3



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 10-20-3] (wedges fully extended through the attachment mounting frame holes).

The levers and wedges must move freely [Figure 10-20-3].

Figure 10-20-4



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-20-4].

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 stump grinder. (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.)

DAILY INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Power 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.

W-2715-0208

Figure 10-20-5

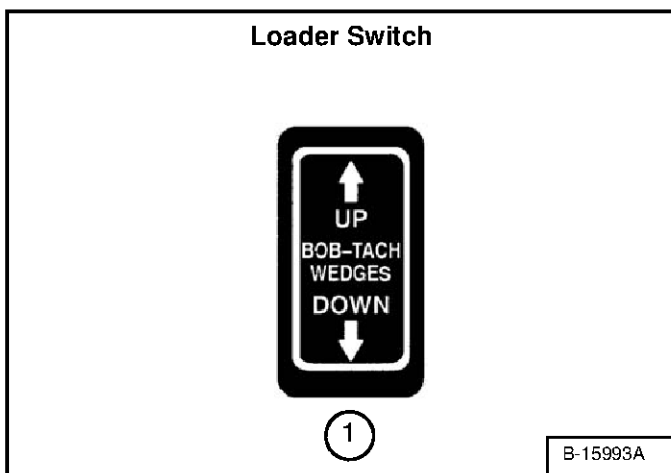


Figure 10-20-6

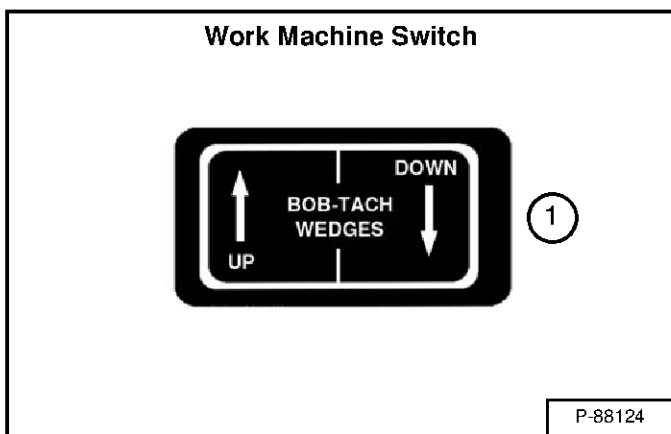
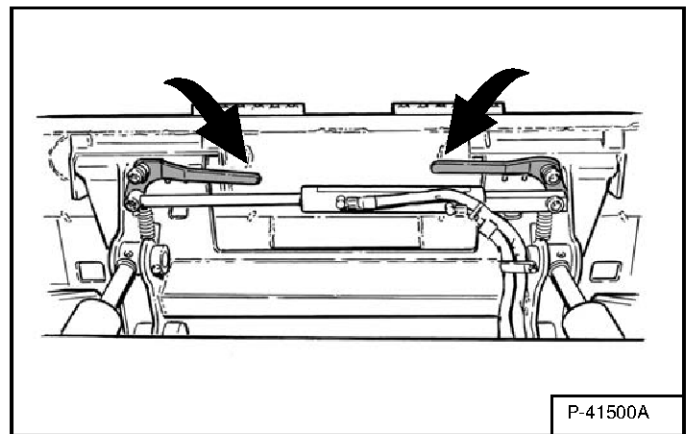
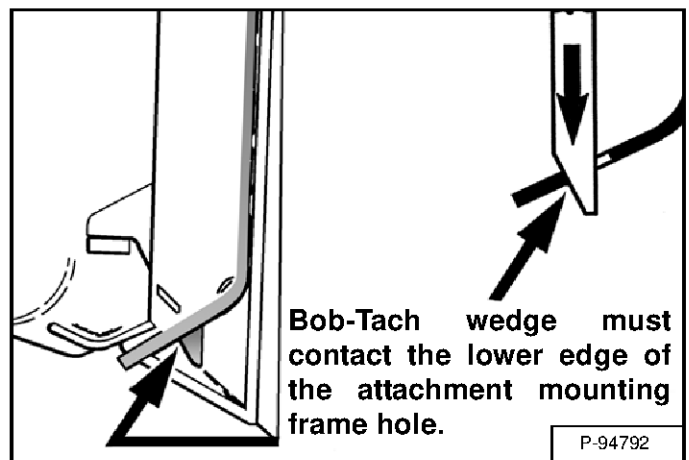


Figure 10-20-7



Push and hold the BOB-TACH "WEDGES DOWN" switch (Item 1) [Figure 10-20-5] or [Figure 10-20-6] until the levers are fully engaged in the locked position [Figure 10-20-7] (wedges fully extended through the attachment mounting frame holes).

Figure 10-20-8



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-20-8].

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 stump grinder. (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.)

DAILY INSPECTION (CONT'D)

Rubber Debris Shield Inspection

SG60 And SGX60

Figure 10-20-9

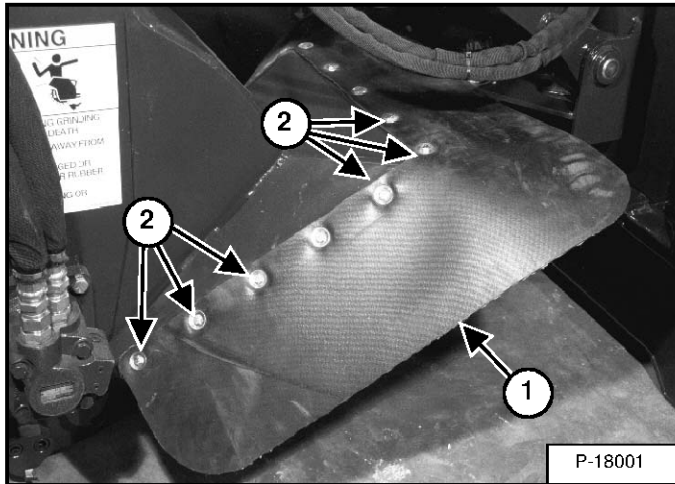
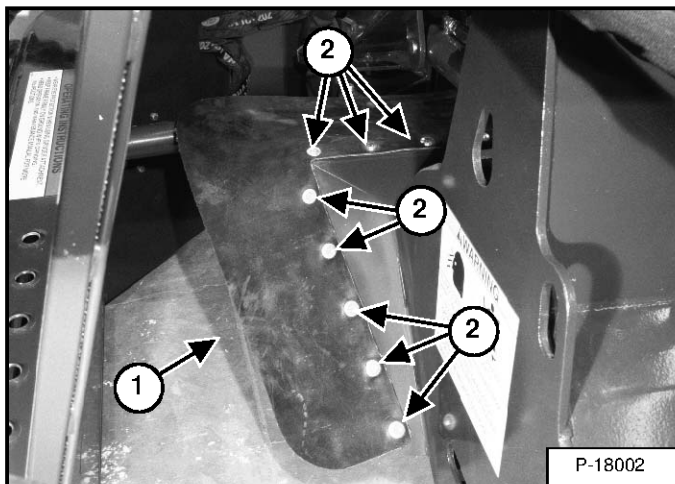


Figure 10-20-10

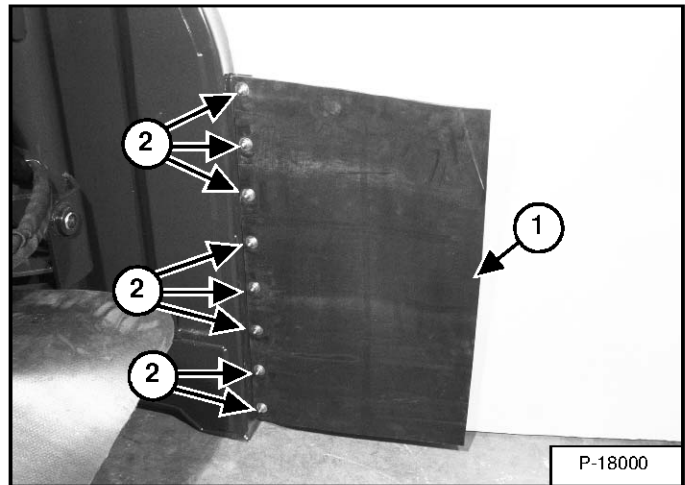


Inspect the cutter wheel rubber debris shield (Item 1) [Figure 10-20-9] and [Figure 10-20-10].

Replace the shield when damaged or worn by removing the fifteen bolts, washers and nuts (Item 2) [Figure 10-20-9] and [Figure 10-20-10].

Installation: Tighten the bolts to 9 - 10 N•m (80 - 90 in-lb) torque.

Figure 10-20-11

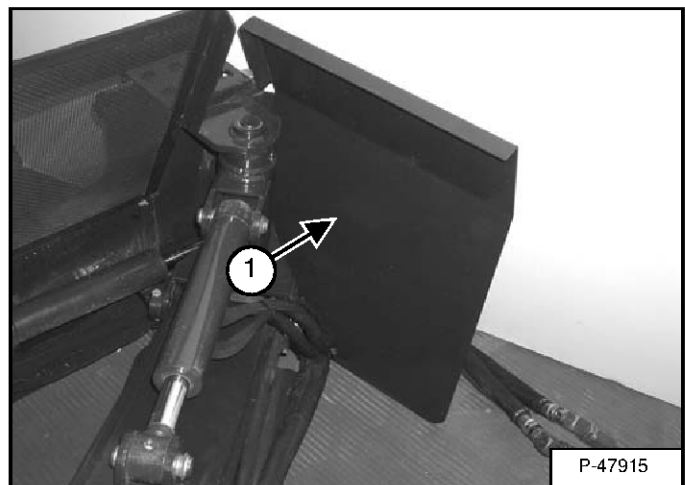


Inspect the side rubber debris shield (Item 1). Replace the shield when damaged or worn by removing the eight bolts, washers and nuts (Item 2) [Figure 10-20-11].

Installation: Tighten the bolts to 9 - 10 N•m (80 - 90 in-lb) torque.

SG30

Figure 10-20-12



Inspect the debris shield (Item 1) [Figure 10-20-12].

