

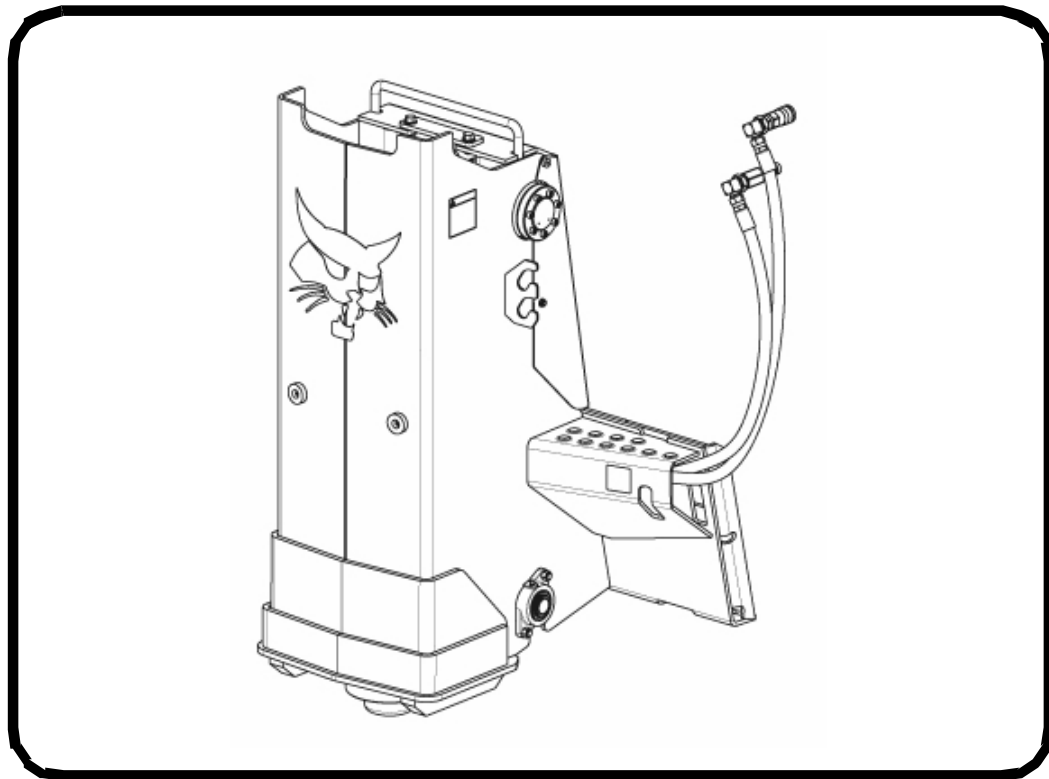


Bobcat®

Service Manual

Drop Hammer

S/N 005800101 & Above
S/N A78D00101 & Above



Product: Bobcat Drop Hammer Service Repair Workshop Manual
Full Download: <https://www.arepairmanual.com/downloads/bobcat-drop-hammer-service-repair-workshop-manual/>

Sample of manual. Download All 122 pages at:
<https://www.arepairmanual.com/downloads/bobcat-drop-hammer-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.

CORRECT



B-10731a

-  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
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**PREVENTIVE
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**MAIN
FRAME**

**SPECIFICATIONS
AND
SCHEMATICS**

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.



Bobcat®

SERIAL NUMBER LOCATIONS

Attachment Serial Number

Figure 1

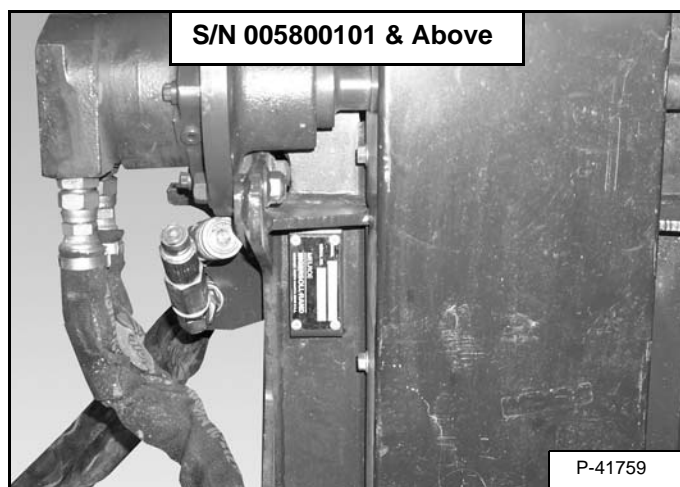
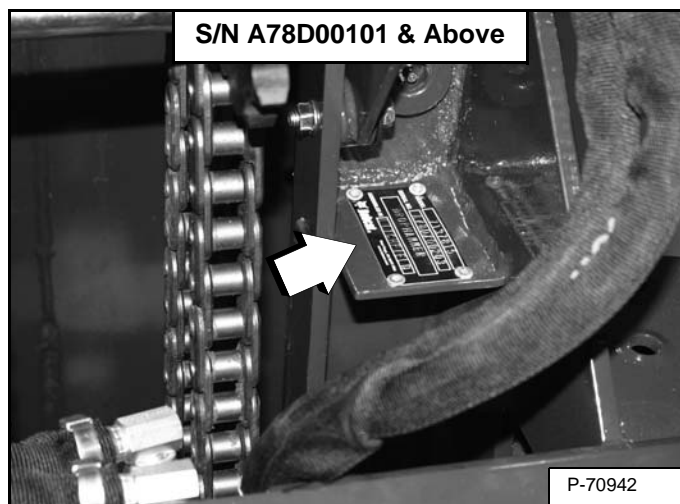


Figure 2



Always use the serial number of the drop hammer 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] and [Figure 2].

NOTE: The later drop hammer (S/N A78D00101 & Above) serial number tag is located under the cover.

DELIVERY REPORT

Figure 3

DELIVERY REPORT

WARNING

P-20022

The delivery report must be filled out by the dealer and signed by the owner or operator when the drop hammer 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)

Drop Hammer (S/N 005800101 & Above)

WARNING

AVOID BURNS FROM HOT HYDRAULIC MOTOR AND QUICK COUPLERS

• Do not touch. Use grab handle for enter and exit.

• Allow to cool before servicing.

SERVICE SCHEDULE

EVERY 8 HOURS OF OPERATION

1. Check mounting frame for damage or cracked welds. Replace or repair if necessary.
2. Check chain tension. Replace chain if necessary.
3. Check for damaged or missing decals or labels. Replace if necessary.
4. Lubricate all (7) grease points.
5. Oil chain and catch.

SEE ATTACHMENT OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

WARNING

AVOID INJURY OR DEATH

- Keep vehicle in place during operation.
- STOP engine and disconnect auxiliary hydraulic lines before servicing attachment.

HANDLE

WEIGHT

TRANSPORT LOCK

7101612

WARNING

AVOID INJURY OR DEATH

Keep 10 feet (3m) away from loader and attachment when in use.

6583862(2)

HYDRAULIC MOTOR

HYDRAULIC CONTROL VALVE

CHAIN GUARD

STEPS

TRANSPORT LOCK

STORAGE POSITION

LOCKED POSITION

To Install:

1. Remove mounting bolts.
2. Place leg of transport lock inside hammer channel.
3. Re-install mounting bolts and torque to 190 ft-lbs (260 N-m).

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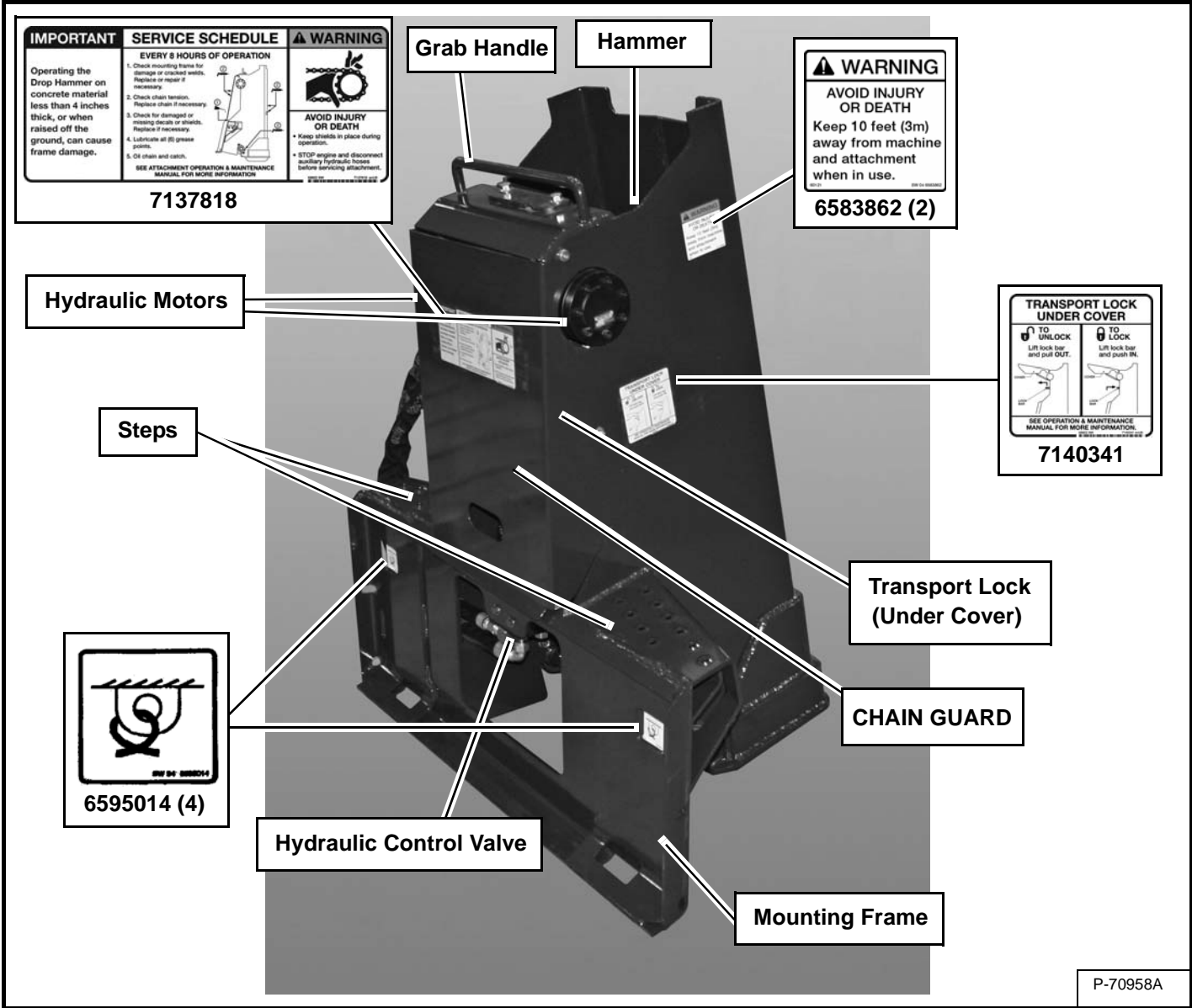
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IV

Drop Hammer Service Manual

IDENTIFICATION AND MACHINE SIGNS (DECALS)

Drop Hammer (S/N A78D00101 & Above)





Bobcat®

PREVENTIVE MAINTENANCE

PREVENTIVE MAINTENANCE

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TROUBLESHOOTING

Chart

PROBLEM	CAUSE	CORRECTION
Loose chain.	Loose jam nut.	Tighten jam nut.
	Worn chain.	Replace chain.
Excessive wear to chain catch, weight and housing.	Poor lubrication.	Lubricate attachment.
	Jam nuts do not have 1/8 in. gap.	Adjust jam nuts to 1/8 in. gap.
Weight contacts frame when dropped.	Excessively worn tool.	Replace tool.
	Skid shoes not placed firmly on the surface.	Position skid shoes on the surface.
Chain does not engage weight during lift cycle.	Lose or worn chain.	Tighten jam nuts or replace the chain.
	Worn catch.	Replace chain and/or weight catch.



DAILY INSPECTION

Drop Hammer Mounting Frame

Figure 10-20-1

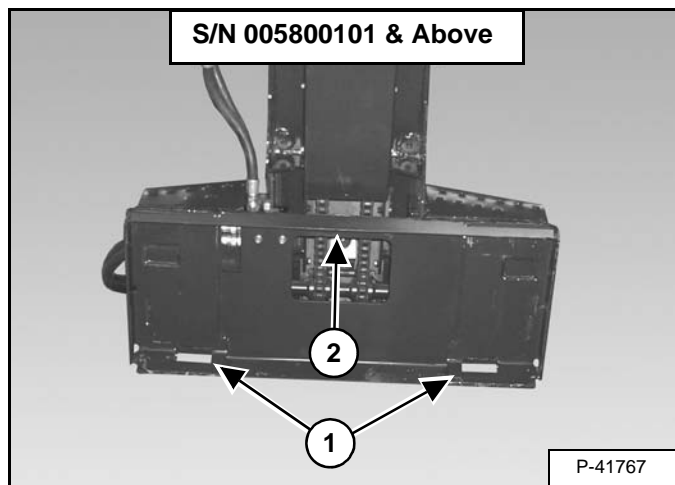
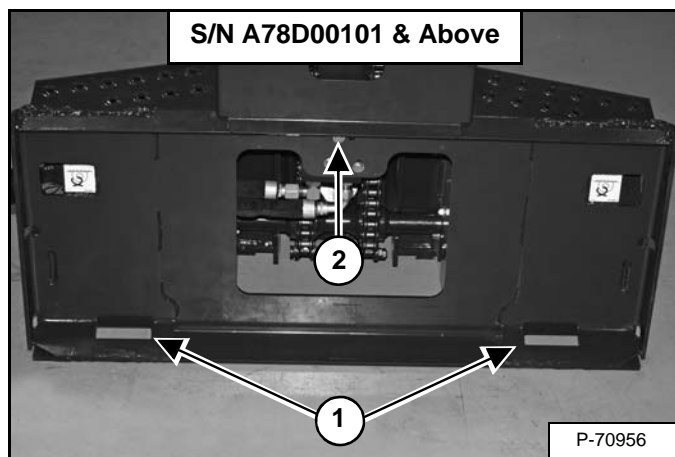


Figure 10-20-2



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

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

Bob-Tach

Hand Lever Bob-Tach

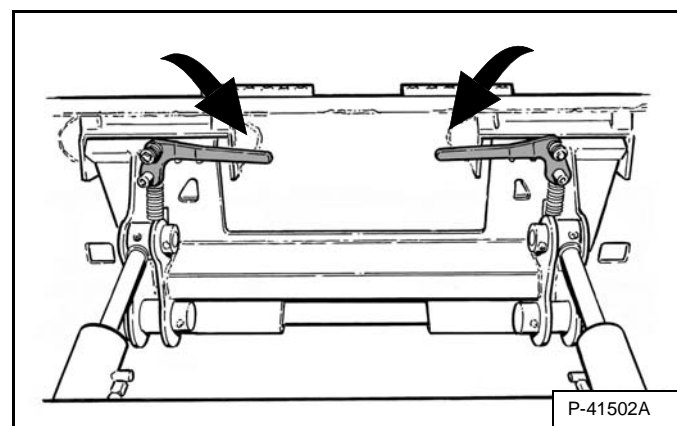
! WARNING

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).

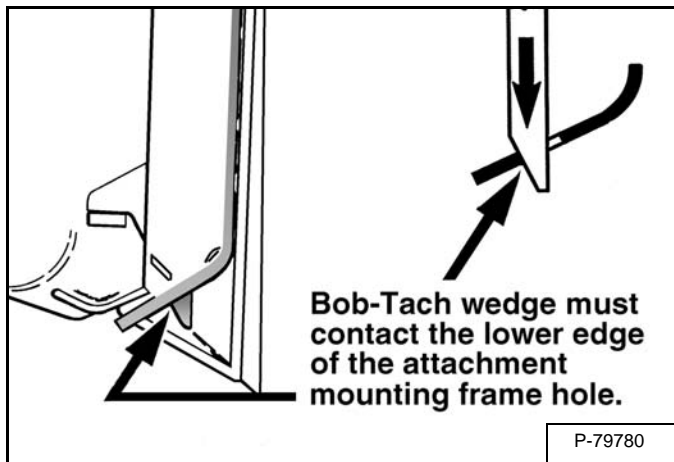
The levers and wedges must move freely [Figure 10-20-3].

DAILY INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Hand Lever Bob-Tach (Cont'd)

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 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.)

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 10-20-5

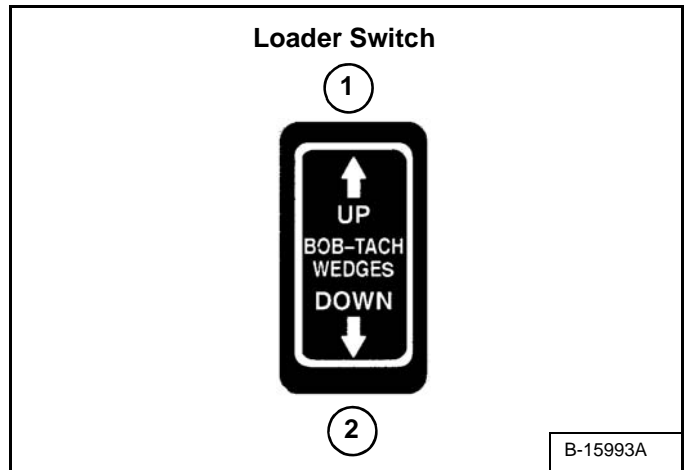


Figure 10-20-6

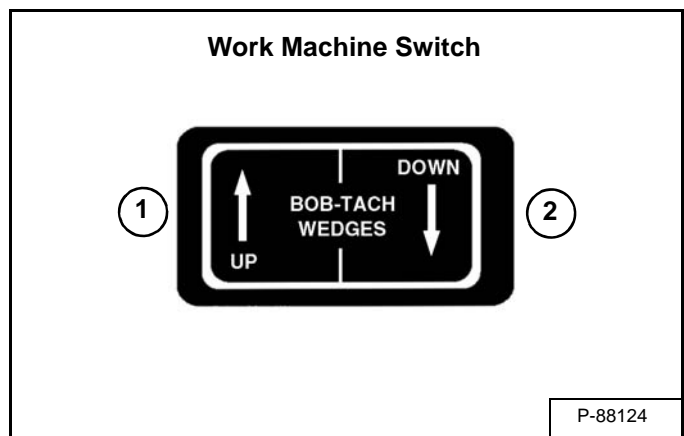
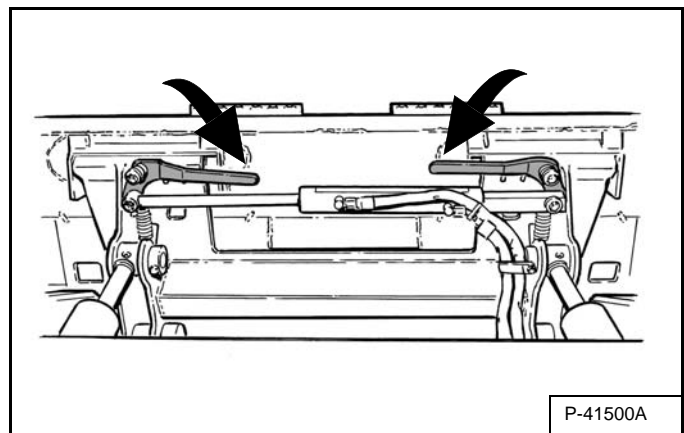


Figure 10-20-7



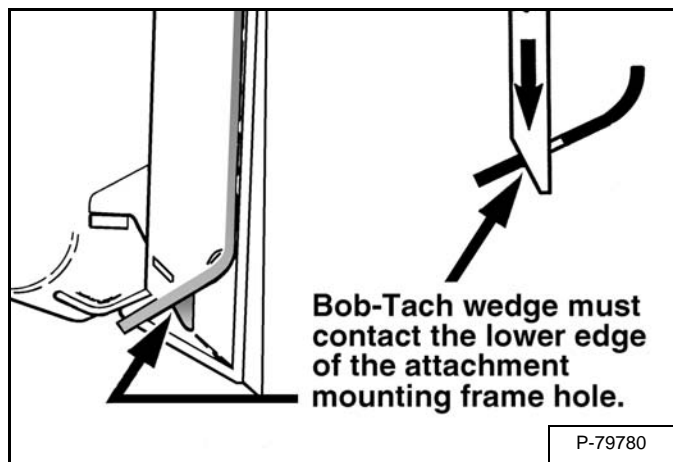
Push and hold the BOB-TACH "WEDGES DOWN" switch (Item 2) [Figure 10-20-5] and [Figure 10-20-6] until the levers are fully engaged in the locked position [Figure 10-20-7] (wedges fully extended through the attachment mounting frame holes).

DAILY INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Power Bob-Tach (Cont'd)

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 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.)

Chain Tension (S/N 005800101 & Above)

Check the chain tension every 8 hours of operation. Replace chain if necessary.

! WARNING

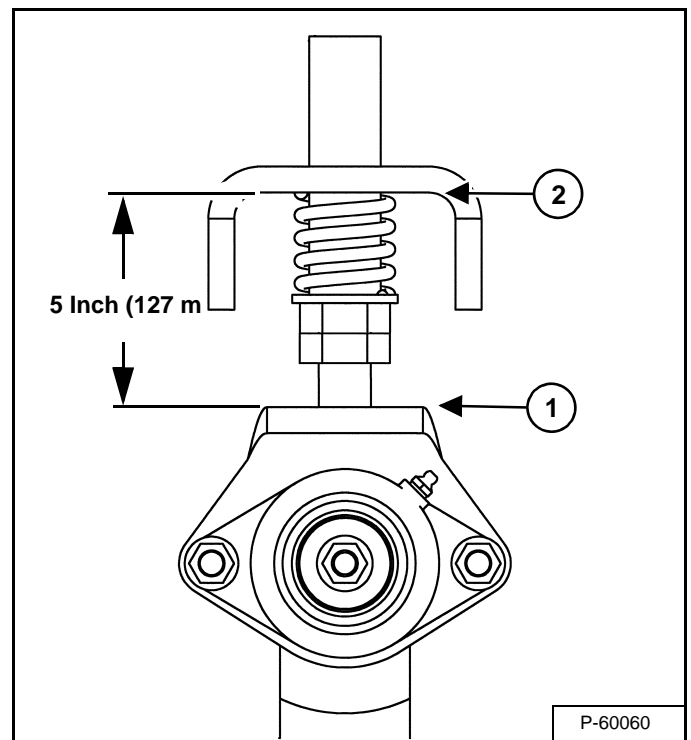
AVOID INJURY OR DEATH

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 10-20-9



Measure the distance from the top of the bearing plate (Item 1) to the bottom of the upper shaft mount (Item 2) [Figure 10-20-9], this measurement should not exceed 5 inches (127 mm).

NOTE: If the measurement exceeds 5 inches (127 mm) replace the chain.

DAILY INSPECTION (CONT'D)

Chain Tension (S/N A78D00101 & Above)

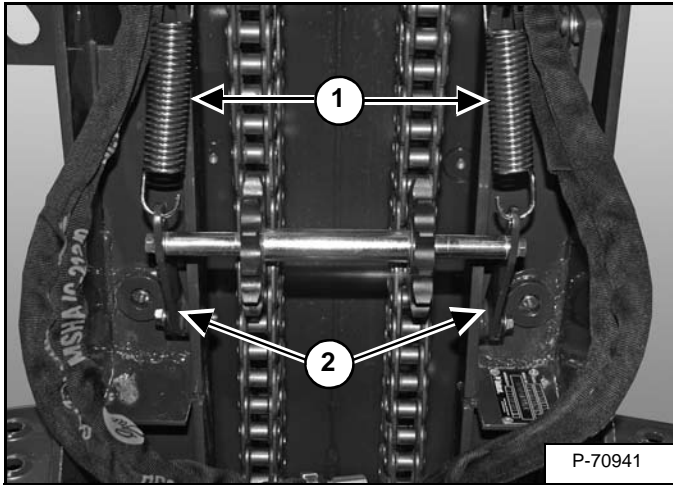
! WARNING

AVOID INJURY OR DEATH
Keep shields in place during operation.

STOP engine and disconnect auxiliary hydraulic hoses before servicing attachment.

W-2549-0107

Figure 10-20-10



Raise cover and inspect the chain. The chain must be held tight with the tensioner springs (Item 1) [Figure 10-20-10]. If the chain is worn beyond tensioner ability, replace chain.

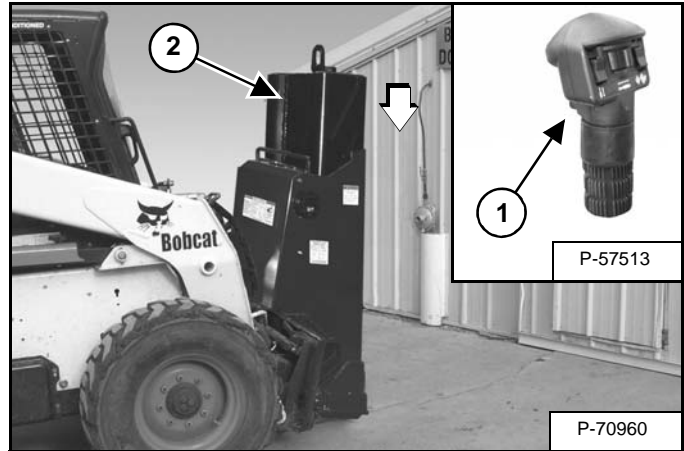
Inspect the tensioner springs (Item 1) [Figure 10-20-10]. Replace tensioner springs if broken.

Inspect the tensioner arms (Item 2) [Figure 10-20-10]. The tensioner arms must move freely.

Cushion Safety Valve (S/N A78D00101 & Above)

NOTE: Cushioned Safety Valve allows the weight to slowly lower if the hydraulic oil flow is stopped before the weight reaches full dropping height.

Figure 10-20-11



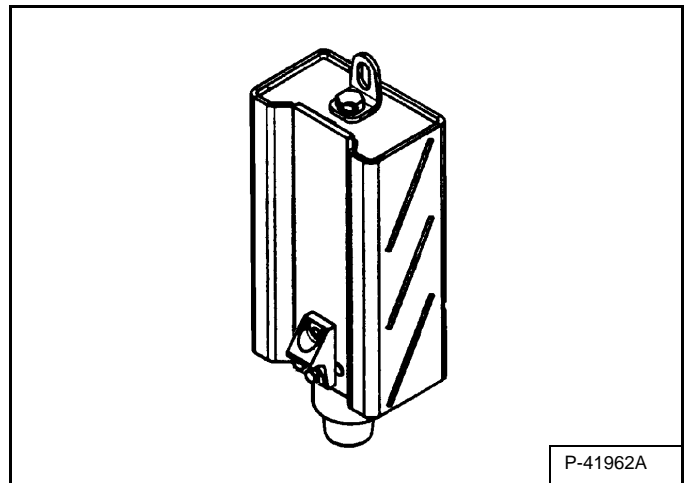
Engage auxiliary hydraulics.

Press the front switch (Item 1) on the right steer lever to start the drop hammer. When the weight (Item 2) begins to raise, press the switch (Item 1) [Figure 10-20-11] a second time stopping the hydraulic flow to the drop hammer. The weight should slowly lower to the ground.

NOTE: If the Cushioned Safety Valve does not operate correctly, see your Bobcat dealer for service.

Weight

Figure 10-20-12



Inspect the weight [Figure 10-20-12] for cracks, reweld as necessary. See Page 30-10-1 for weight removal and installation.

LUBRICATION

Lubrication Points (S/N 005800101 & Above)

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

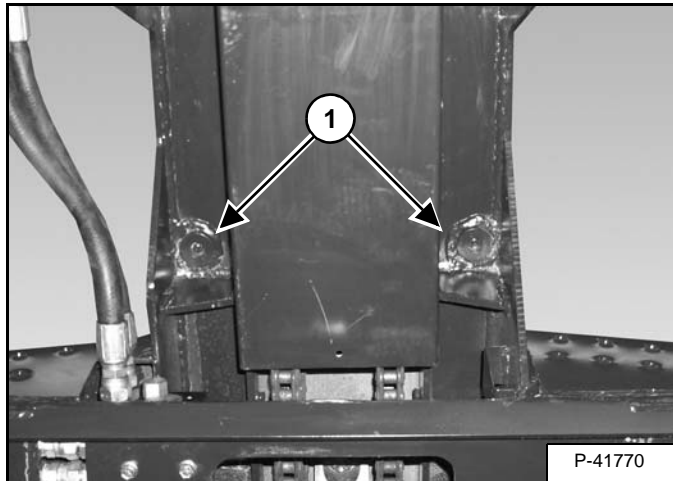
IMPORTANT

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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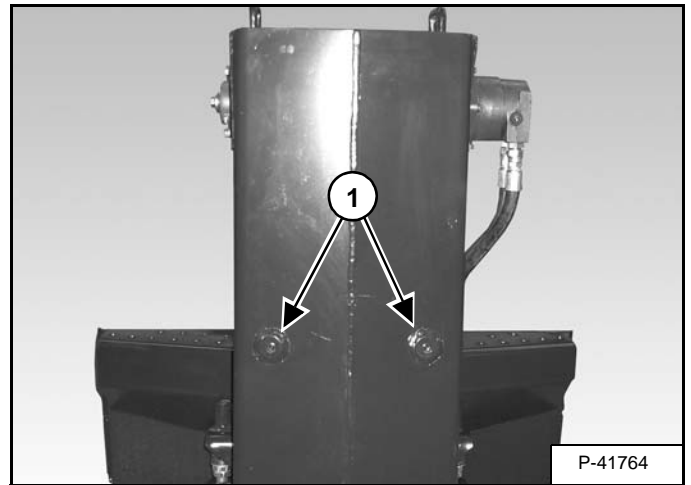
Lubricate the following locations on the drop hammer every 8 hours:

Figure 10-30-1



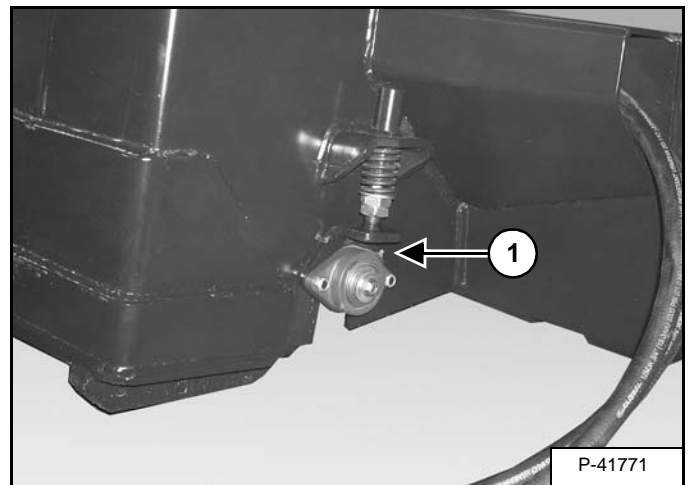
Grease points (Item 1) [Figure 10-30-1] are located on the rear of the weight housing.

Figure 10-30-2



Grease points (Item 1) [Figure 10-30-2] are located on the front of the weight housing.

Figure 10-30-3

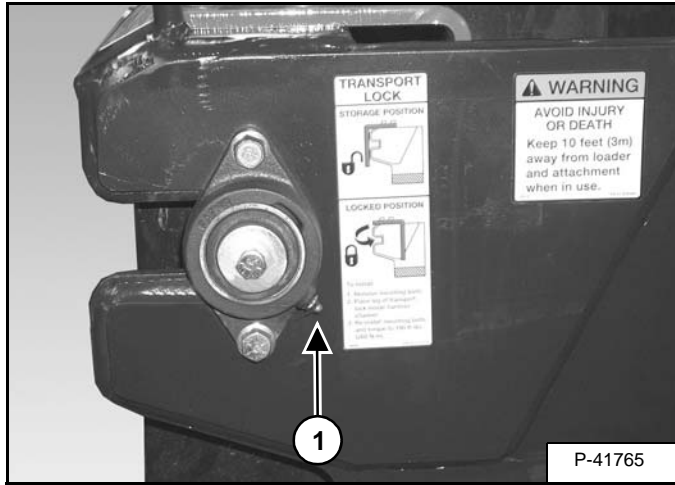


Grease point (Item 1) [Figure 10-30-3] is located on the bottom left and right side of the weight housing.

LUBRICATION (CONT'D)

Lubrication Points (S/N 005800101 & Above) (Cont'd)

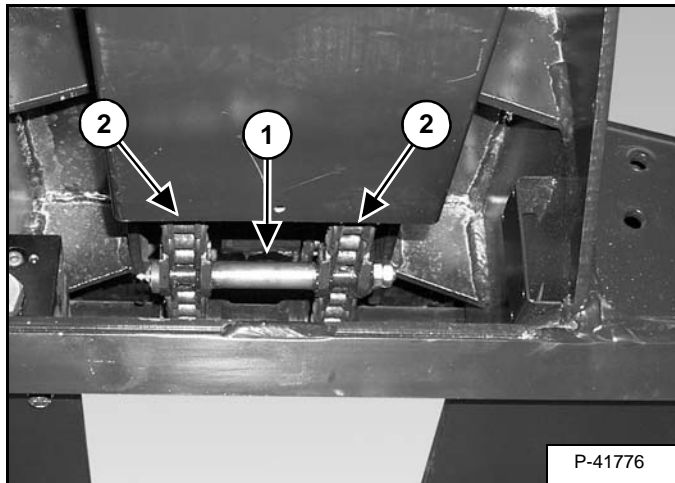
Figure 10-30-4



Grease point (Item 1) [Figure 10-30-4] is located on the top right side of the weight housing.

NOTE: The following lubrication points are to be oiled not greased.

Figure 10-30-5



Apply a generous amount of oil to the chain catch (Item 1) and chains (Item 2) [Figure 10-30-5] every 8 hours of operation.

Lubrication Points (S/N A78D00101 & Above)

Always use a good quality lithium base multi purpose grease when lubricating the attachment. Apply the 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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! WARNING

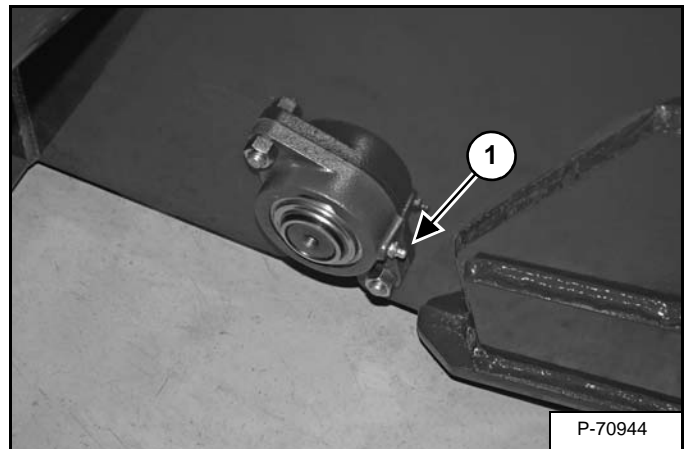
AVOID INJURY OR DEATH
Keep shields in place during operation.

STOP engine and disconnect auxiliary hydraulic hoses before servicing attachment.

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Lubricate the following six locations on the drop hammer every 8 hours:

Figure 10-30-6

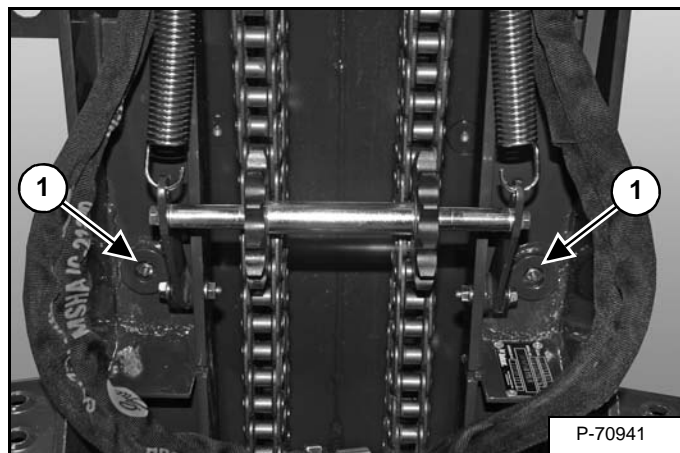


Grease point (Item 1) [Figure 10-30-6] are located on both sides of the lower sprocket.

LUBRICATION (CONT'D)

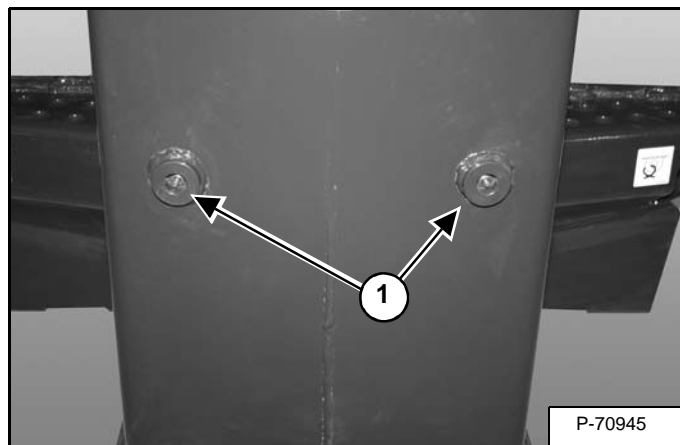
Lubrication Points (S/N A78D00101 & Above) (Cont'd)

Figure 10-30-7



Grease points (Item 1) [Figure 10-30-7] inside the chain guard.

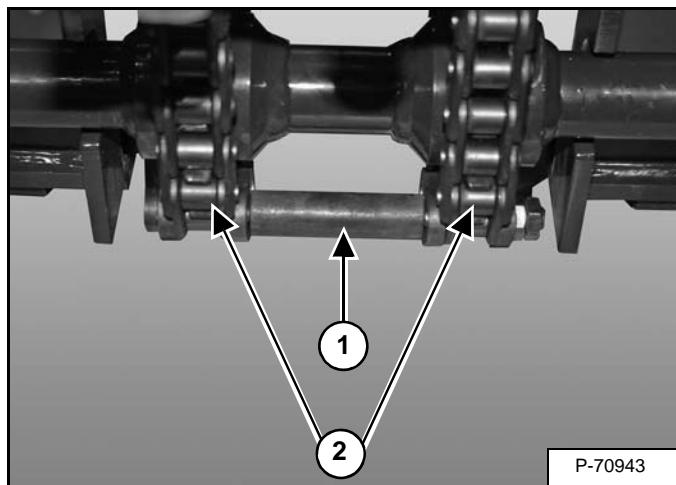
Figure 10-30-8



Grease points (Item 1) [Figure 10-30-8] are located on the front of the weight housing.

NOTE: The following lubrication points are to be oiled, not greased.

Figure 10-30-9



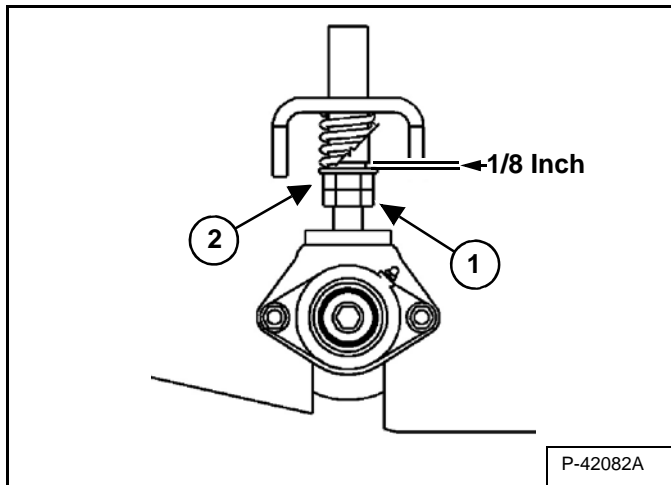
Apply a generous amount of oil to the chain catch (Item 1) and chain (Item 2) [Figure 10-30-9] every 8 hours of operation.



CHAIN

Chain Tension (005800101 & Above)

Figure 10-40-1



Loosen jam nut (Item 1), tighten nut (Item 2) until the space between the washer and tube is approximately 1/8 inch. Tighten jam nut (Item 1) [Figure 10-40-1].

NOTE: Once the 1/8 inch gap has been set and the chains are still loose, replace the chains.

Chain Tension (A78D00101 & Above)

WARNING

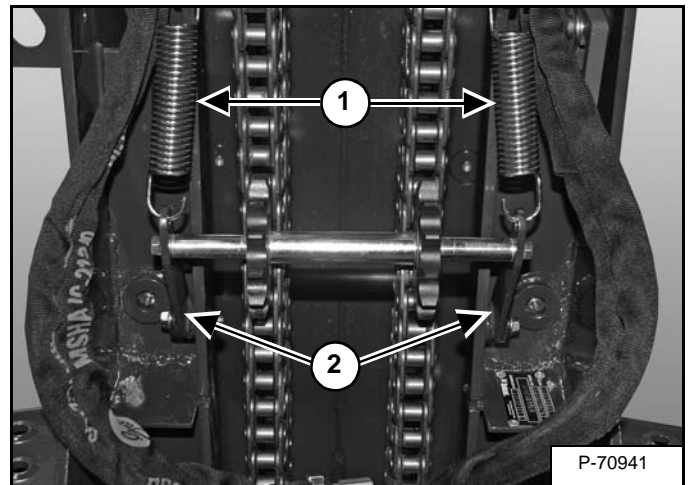
AVOID INJURY OR DEATH

Keep shields in place during operation.

STOP engine and disconnect auxiliary hydraulic hoses before servicing attachment.

W-2549-0107

Figure 10-40-2



Raise cover and inspect the chain. The chain must be held tight with the tensioner springs (Item 1) [Figure 10-40-2]. If the chain is worn beyond tensioner ability, replace chain.

Inspect the tensioner springs (Item 1) [Figure 10-40-2]. Replace tensioner springs if broken.


Inspect the tensioner arms (Item 2) [Figure 10-40-2]. The tensioner arms must move freely.



TRANSPORT LOCK

Operation (S/N 005800101 & Above)

Figure 10-50-3



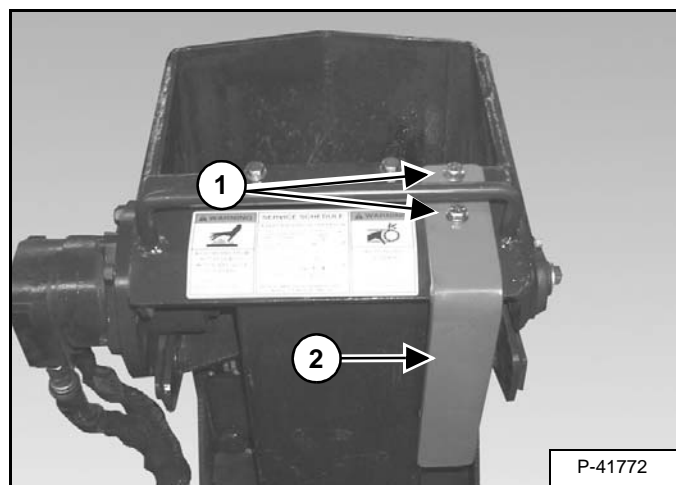
WARNING

AVOID INJURY OR DEATH

Always install the Transport Lock when transporting the drop hammer. Failure to obey this instruction could cause the weight to shift, causing serious injury, death or property damage.

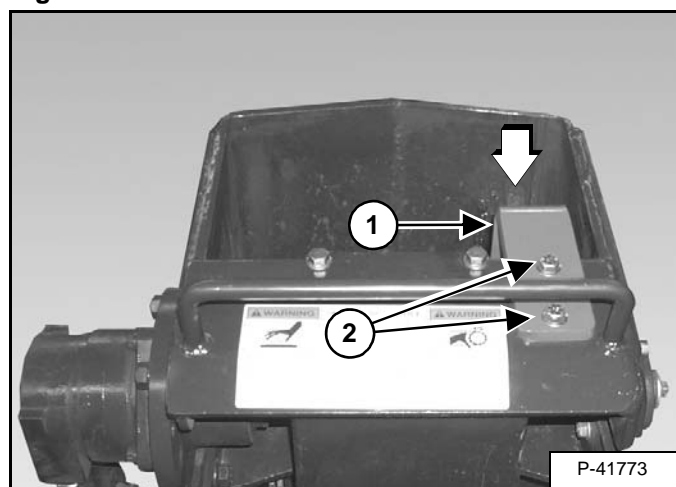
W-2489-1203

Figure 10-50-1



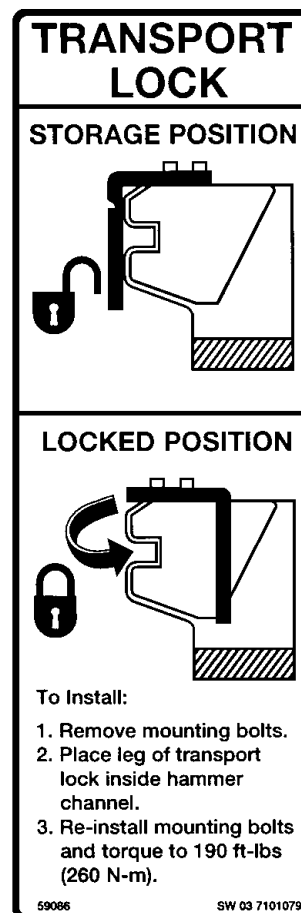
Remove bolts (Item 1) and remove stop (Item 2) [Figure 10-50-1].

Figure 10-50-2



Rotate the stop (Item 1) [Figure 10-50-2], placing the stop inside the weight housing.

Reinstall bolts (Item 2) [Figure 10-50-2] and tighten to 190 ft.-lb. (260 N•m) torque.



TRANSPORT LOCK (CONT'D)

Operation (S/N A78D00101 & Above)

! WARNING

AVOID INJURY OR DEATH

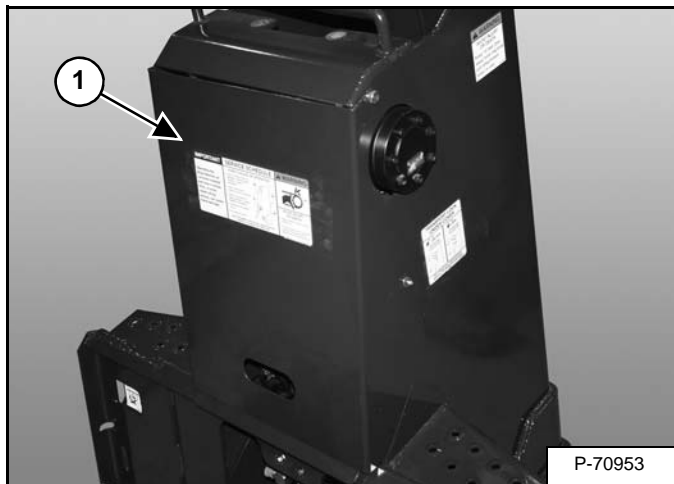
Always install the Transport Lock when transporting the drop hammer. Failure to obey this instruction could cause the weight to shift, causing serious injury, death or property damage.

W-2489-1203

Figure 10-50-4



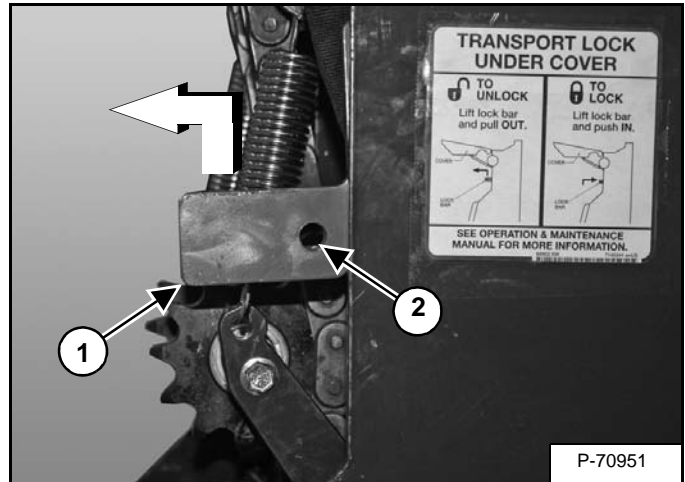
Figure 10-50-5



Raise chain guard (Item 1) [Figure 10-50-5].

To Unlock

Figure 10-50-6

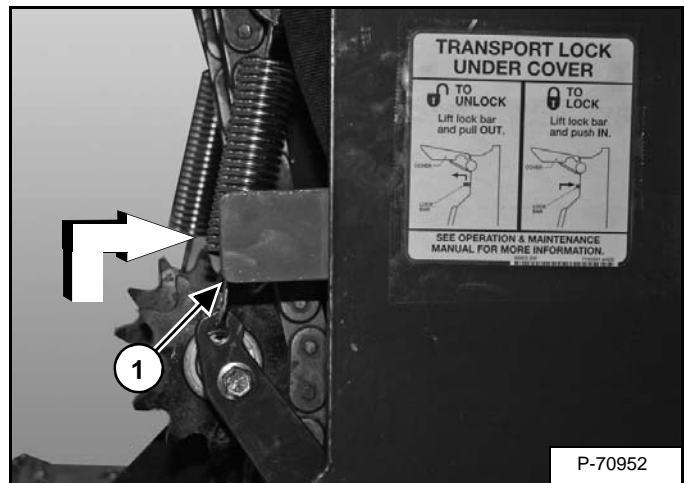


Lift lock bar (Item 1) [Figure 10-50-6] and pull OUT.

When the hole (Item 2) [Figure 10-50-6] in the lock bar is visible, the Transport Lock is unlocked.

To Lock

Figure 10-50-7



Lift lock bar (Item 1) [Figure 10-50-7] and push IN.

Make sure the lock bar is fully seated.

Note: If the lock bar is not fully seated in either the locked or unlocked position, the cover will not fully close.

Close chain guard (Item 1) [Figure 10-50-7].

HYDRAULIC SYSTEM

HYDRAULIC SYSTEM

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