

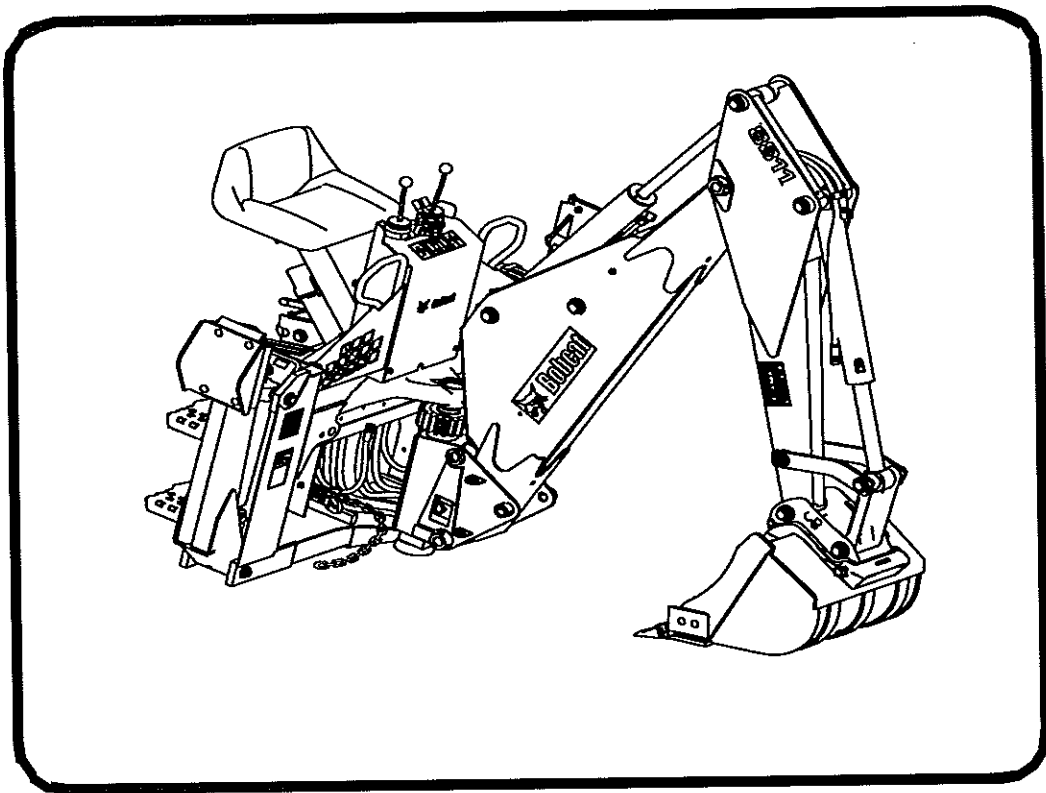


Bobcat®

Operation & Maintenance Manual

8811 Backhoe

(8811 BACKHOE) S/N 630100101 & Above
(8811 BACKHOE) S/N A55800101 & Above



OPERATOR SAFETY WARNINGS

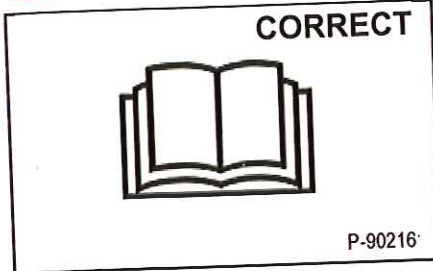


WARNING

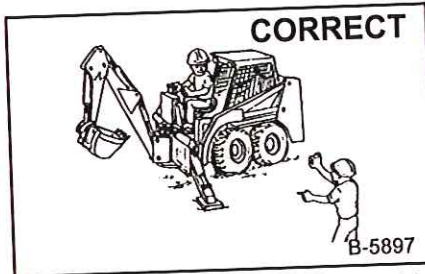
Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W-2001-0502

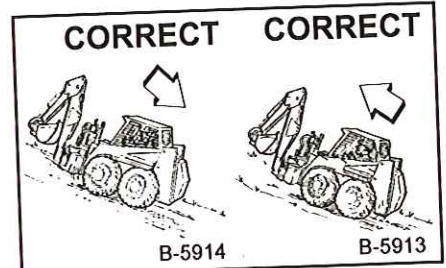
Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



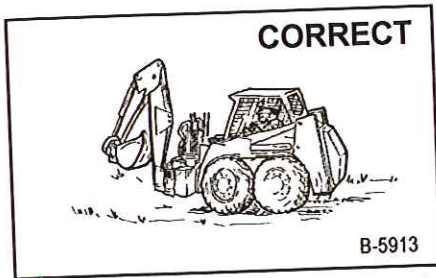
⚠ Never use the loader / backhoe without instructions. Read Operation & Maintenance Manual for backhoe and Operator's Handbook for loader. Ask dealer about equipment for your application.



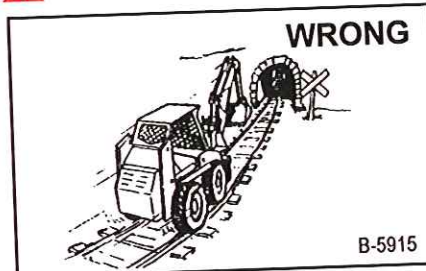
⚠ Never permit personnel to stand in the maximum swing reach area while operating the backhoe.
 ⚠ Always swing backhoe to the uphill side. Use extra care if down hill dumping is necessary.
 ⚠ Keep machine level when operating backhoe on slopes.
 ⚠ Always use backhoe stabilizers.



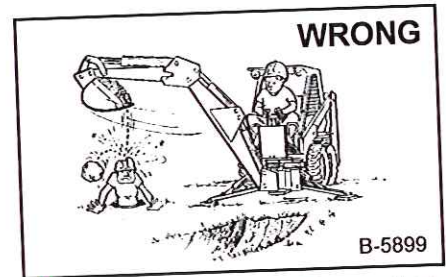
⚠ Keep backhoe low and always drive with backhoe uphill when moving on slopes.



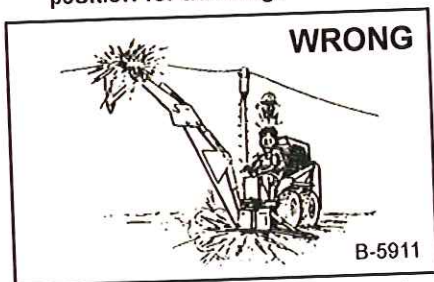
⚠ Lock backhoe in transport position for traveling.



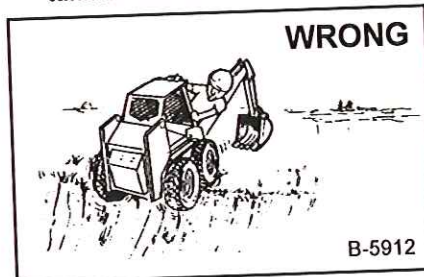
⚠ Before going into underpasses or tunnels check for obstacles.



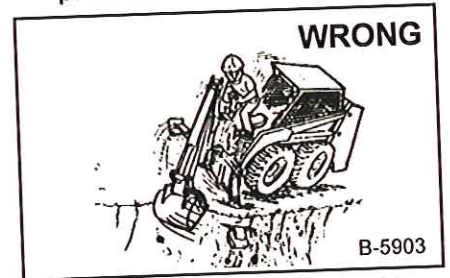
⚠ Never swing the bucket over other personnel.



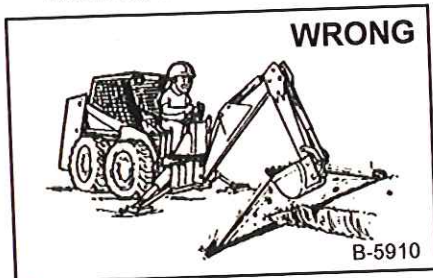
⚠ Check for clearance under overhead lines.



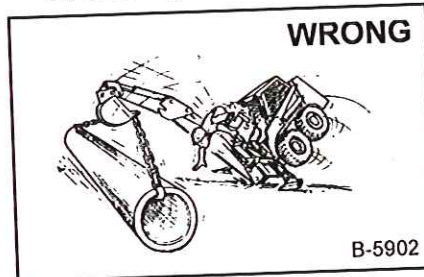
⚠ Never operate the machine near an overhang or ditch.



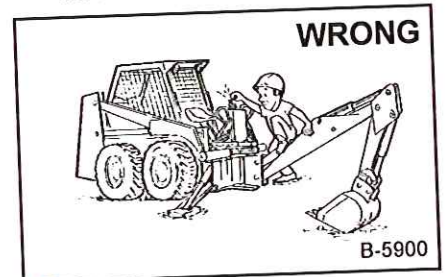
⚠ Never dig under backhoe stabilizers.



⚠ Check the area to be dug for underground lines such as electrical, gas, oil, water, etc. Use extreme caution in areas where present. Check with local utilities before digging.



⚠ Never lift objects that are too heavy.
 ⚠ Always keep object balanced and as near to the loader as possible when lifting with backhoe. Swing lifted object slowly. Always lower objects to ground before leaving machine.



⚠ Operate only from operator seat.
 ⚠ Never use controls as a handhold.
 ⚠ Always lower the backhoe to ground, stop loader engine, remove key, and lock brake before leaving machine.
 ⚠ Leave backhoe with controls in neutral position.



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REFERENCE INFORMATION

Write the correct information for YOUR Bobcat backhoe in the spaces below. Always use these numbers when referring to your Bobcat backhoe.

Backhoe Serial Number _____

NOTES:

YOUR BOBCAT DEALER:

ADDRESS:

PHONE:

Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128
UNITED STATES OF AMERICA

Doosan Benelux SA
Drève Richelle 167
B-1410 Waterloo
BELGIUM



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FOREWORD

This Operation & Maintenance Manual was written to give the owner / operator instructions on the safe operation and maintenance of the Bobcat backhoe. **READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR BOBCAT BACKHOE.** If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your Bobcat backhoe.

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BOBCAT COMPANY IS ISO 9001 CERTIFIED



ISO 9001 is an international standard that specifies requirements for a quality management system that controls the processes and procedures which we use to design, develop, manufacture and distribute Bobcat products.

British Standards Institute (BSI) is the Certified Registrar Bobcat Company chose to assess the Company's compliance with the ISO 9001 at Bobcat's manufacturing facilities in Gwinner and Bismarck, North Dakota (U.S.A.), Pontchateau (France), Dobris (Czech Republic) and the Bobcat corporate offices (Gwinner, Bismarck & West Fargo) in North Dakota. Only certified assessors, like BSI, can grant registrations.

ISO 9001 means that as a company we say what we do and do what we say. In other words, we have established procedures and policies, and we provide evidence that the procedures and policies are followed.

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.



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SERIAL NUMBER LOCATION

Attachment Serial Number

Figure 1

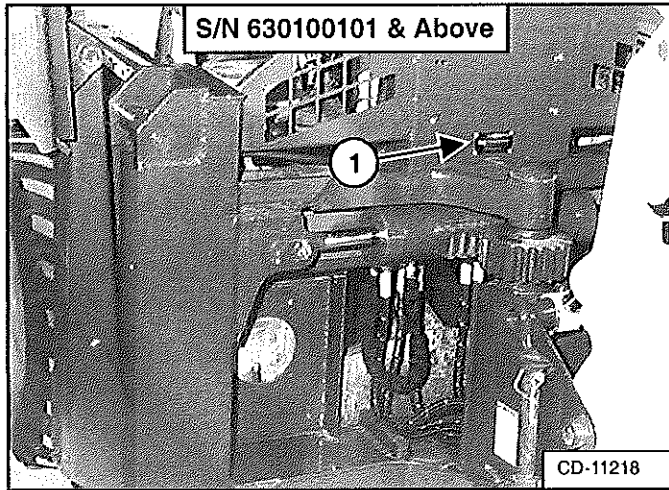
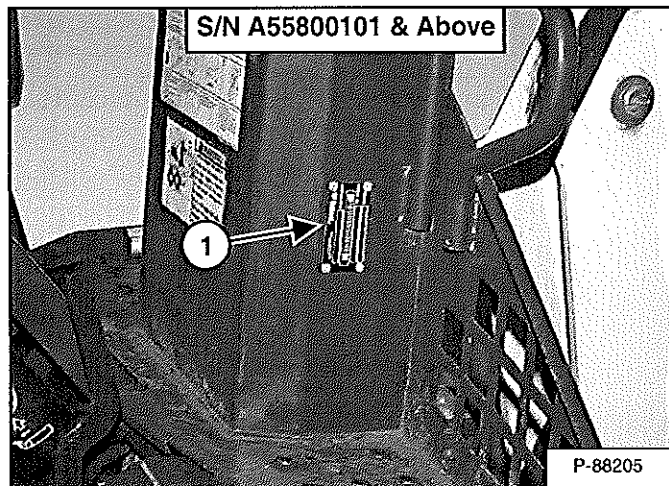


Figure 2



Always use the serial number of the backhoe 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 (Item 1) [Figure 1] and [Figure 2].

DELIVERY REPORT

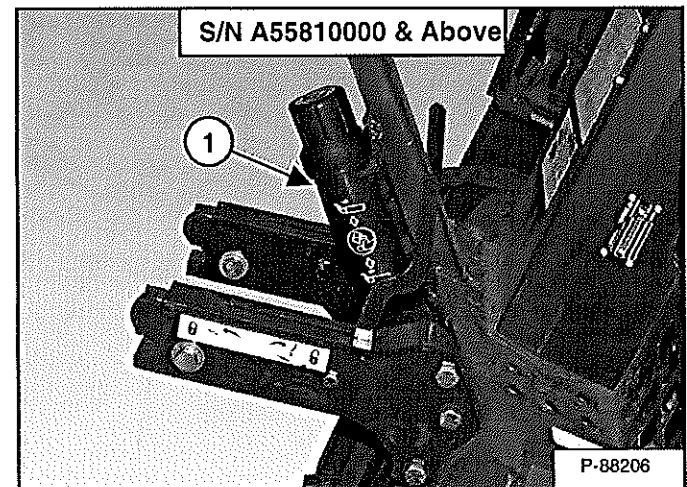
Figure 3

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 are several lines for text entry. To the left of these lines is a section titled "WARNING" with a black background and white text. Below the "WARNING" section are several lines for text entry. The bottom right corner of the form contains the text "B-16315".

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

MANUAL STORAGE LOCATION

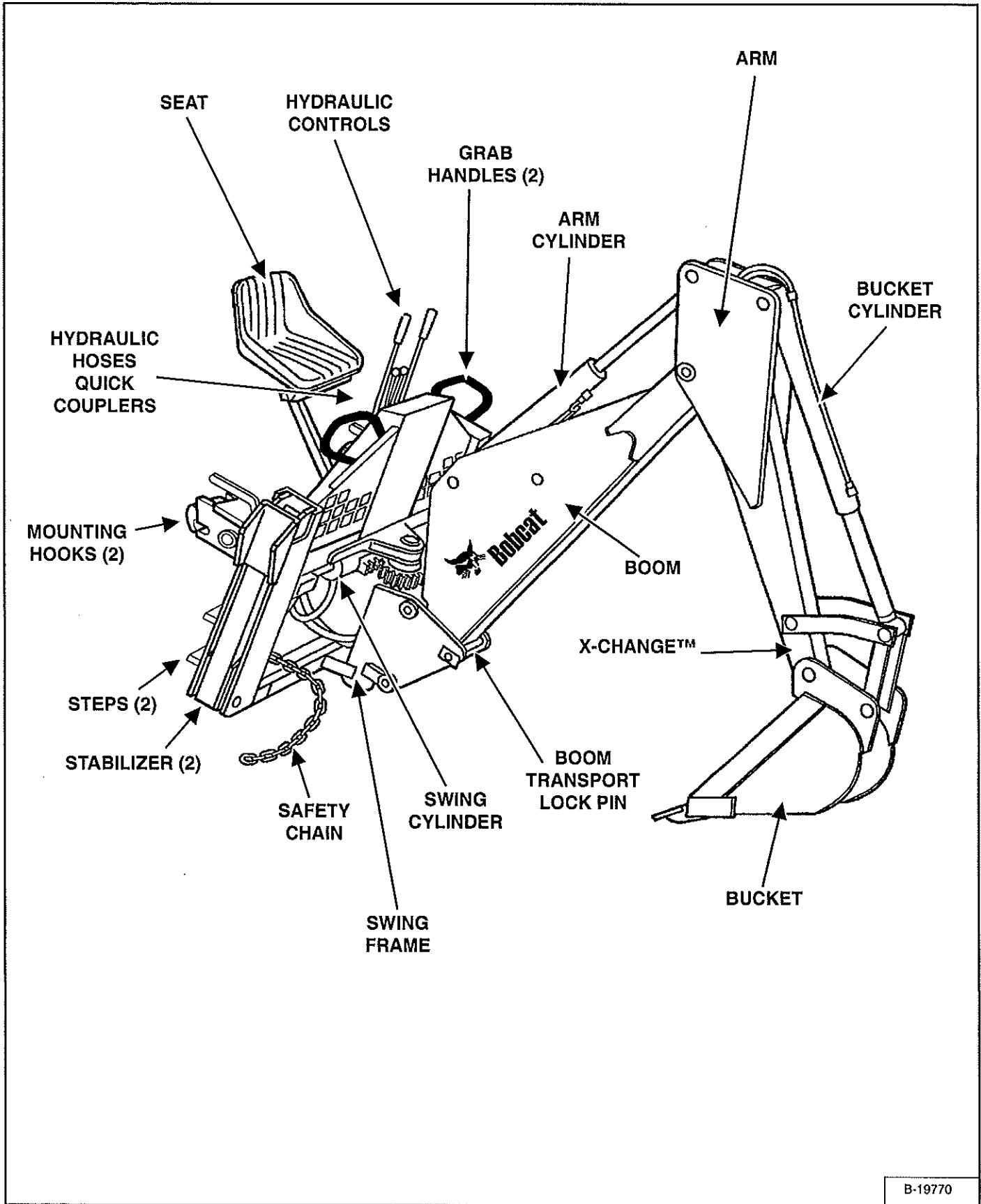
Figure 4



The manual storage container (Item 1) [Figure 4] is located on the tube for the backhoe operator's seat.

ATTACHMENT IDENTIFICATION

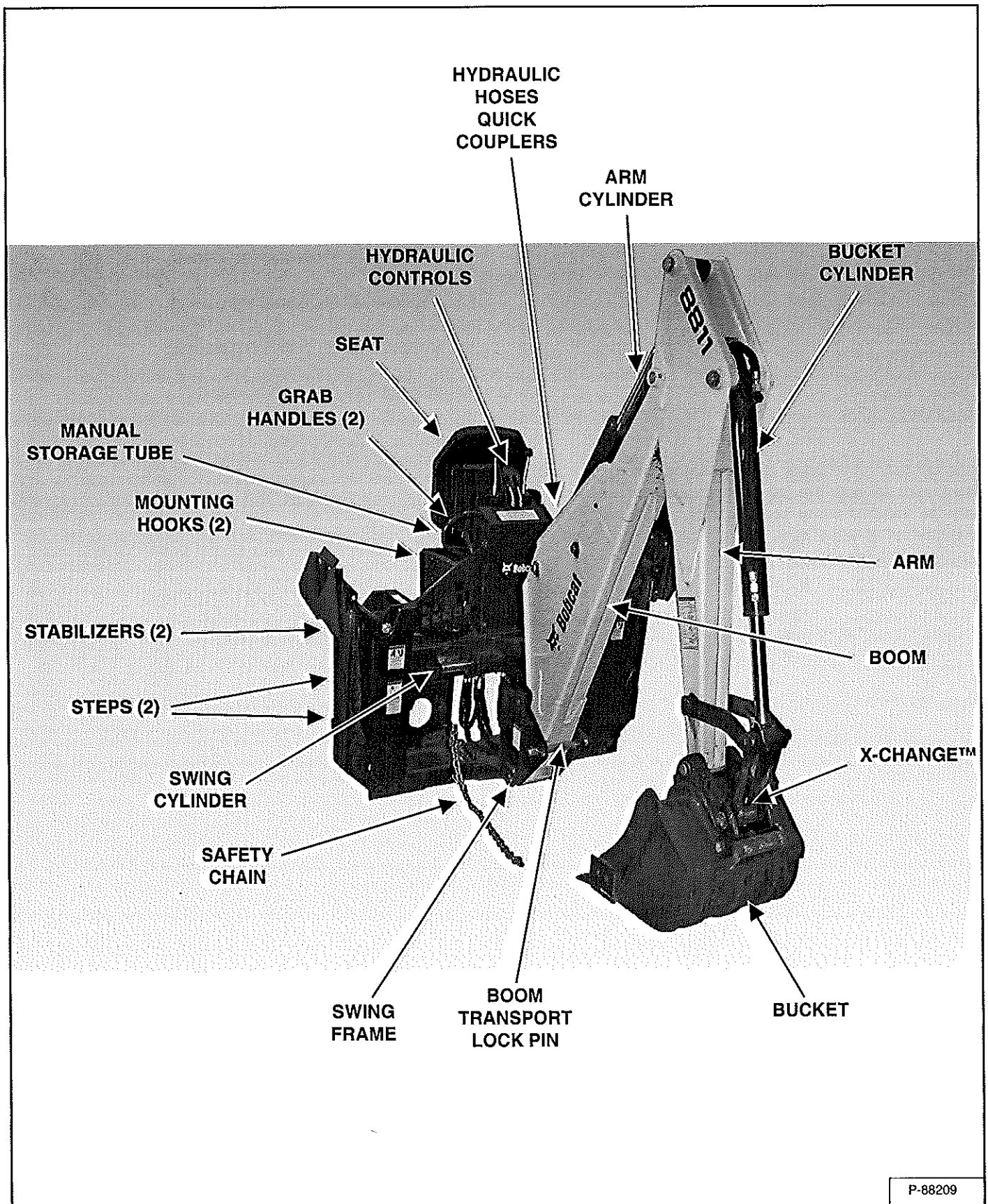
S/N 630100101 & Above, S/N A55809999 & Below



B-19770

ATTACHMENT IDENTIFICATION (CONT'D)

S/N A55810000 & Above



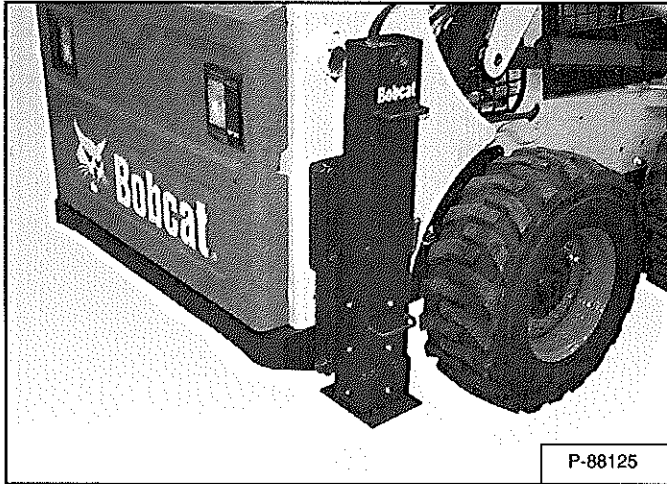
P-88209

FEATURES AND ACCESSORIES

Options And Accessories

Rear Stabilizers

Figure 5



Optional rear stabilizers are available for your model loader for use with the backhoe attachment [Figure 5]. Increase your backhoe performance and increase your versatility in a wide range of jobs with a set of frame mounted rear stabilizers.

Buckets Available

- 330 mm (13 in) Trenching Bucket
- 330 mm (13 in) HD Trenching Bucket
- 406 mm (16 in) Trenching Bucket
- 457 mm (18 in) Trenching Bucket
- 457 mm (18 in) HD Trenching Bucket
- 508 mm (20 in) Trenching Bucket
- 610 mm (24 in) Trenching Bucket
- 762 mm (30 in) Trenching Bucket
- 914 mm (36 in) Trenching Bucket
- 991 mm (39 in) Grading Bucket

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SAFETY INSTRUCTIONS

Safe Operation Is The Operator's Responsibility

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

	WARNING
---	----------------

Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W-2001-0502

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284

	DANGER
---	---------------

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

D-1002-1107

	WARNING
---	----------------

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

W-2044-1107

The Bobcat machine and attachment must be in good operating condition before use.

Check all of the items on the Bobcat Service Schedule Decal under the 8 - 10 hour column or as shown in the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the attachment.

A Qualified Operator Must Do The Following:

Understand the Written Instructions, Rules and Regulations

- The written instructions from Bobcat Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, Safety Manual and machine signs (decals).
- Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation

- Operator training must consist of a demonstration and verbal instruction. This training is given by your Bobcat dealer before the product is delivered.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the machine load capacities. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of load if handling dense material.
- The operator must know any prohibited uses or work areas, for example, he or she needs to know about excessive slopes.
- Know the location of any underground lines. Call local utilities or the TOLL FREE phone number found in the *Call Before You Dig* section of this manual.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, respiratory equipment, hearing protection, Special Applications Kits or a Front Window Guard are required for some work. See your Bobcat dealer about Bobcat safety equipment for your machine.

SI ATT-0511

SAFETY INSTRUCTIONS (CONT'D)

Use Safety Rules

- Read and follow instructions in the machine and the attachment's Operation & Maintenance Manual before operating.
- Check for underground lines before operating attachment (if applicable).
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Check that the Bob-Tach™ levers are in the locked position and the wedges are fully engaged into the holes of the attachment (if applicable).
- Check that the attachment is securely fastened to the machine.
- Make sure all the machine controls are in the NEUTRAL position before starting the machine.
- Operate the attachment only from the operator's position.
- Operate the attachment according to the Operation & Maintenance Manual.
- When learning to operate the attachment, do it at a slow rate in an area clear of bystanders.
- DO NOT permit personnel to be in the work area when operating the machine and attachment.
- The attachment must be used ONLY on approved machines. See your Bobcat dealer for updated list of approved attachments for each machine model.
- DO NOT modify equipment or add attachments that are not approved by the manufacturer.
- DO NOT make any adjustments or repairs on the machine or attachment while the engine is running.
- Keep shields and guards in place. Replace if damaged.

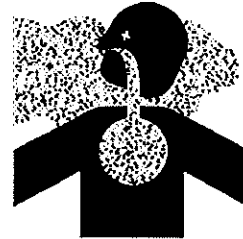
Call Before You Dig



Call Before You Dig Dial 811 (USA Only) 1-888-258-0808 (USA & Canada)

When you call, you will be directed to a location in your state / province, or city for information about buried lines (telephone, cable TV, water, sewer, gas, etc.).

Avoid Silica Dust



Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica dust. Do not exceed Permissible Exposure Limits (PEL) to silica dust as determined by OSHA or other job site Rules and Regulations. Use a respirator, water spray or other means to control dust. Silica dust can cause lung disease and is known to the state of California to cause cancer.

SI ATT-0511

FIRE PREVENTION



Maintenance

The machine and some attachments have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard.

The operator's area, engine compartment and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.

All fuels, most lubricants and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Operation

Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.

Electrical



Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

Battery gas can explode and cause serious injury. Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

Hydraulic System

Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.

Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

Fueling



Stop the engine and let it cool before adding fuel. No smoking! Do not refuel a machine near open flames or sparks. Fill the fuel tank outdoors.

Starting

Do not use ether or starting fluids on any engine that has glow plugs. These starting aids can cause explosion and injure you or bystanders.

Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.

Spark Arrester Exhaust System

The spark arrester exhaust system is designed to control the emission of hot particles from the engine and exhaust system, but the muffler and the exhaust gases are still hot.

Check the spark arrester exhaust system regularly to make sure it is maintained and working properly. Use the procedure in the Operation & Maintenance Manual for cleaning the spark arrester muffler (if equipped).

FIRE PREVENTION (CONT'D)

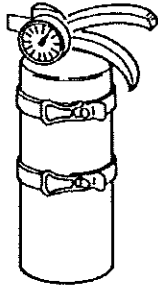
Welding And Grinding

Always clean the machine and attachment, disconnect the battery, and disconnect the wiring from the Bobcat controllers before welding. Cover rubber hoses, battery and all other flammable parts. Keep a fire extinguisher near the machine when welding.

Have good ventilation when grinding or welding painted parts. Wear dust mask when grinding painted parts. Toxic dust or gas can be produced.

Dust generated from repairing nonmetallic parts such as hoods, fenders or covers can be flammable or explosive. Repair such components in a well ventilated area away from open flames or sparks.

Fire Extinguishers

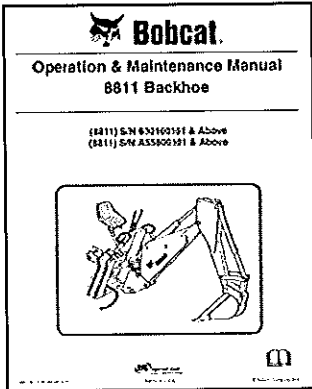


Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.

PUBLICATIONS AND TRAINING RESOURCES

The following publications are also available for your Bobcat attachment. You can order them from your Bobcat dealer.

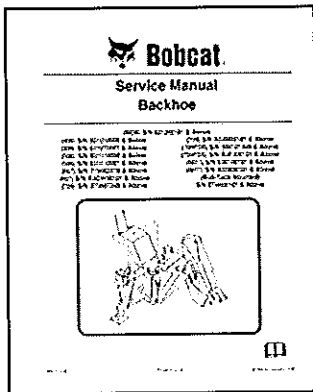
For the latest information on Bobcat products and the Bobcat Company, visit our web site at www.bobcat.com



OPERATION & MAINTENANCE MANUAL

6901767

Complete instructions on the correct operation and the routine maintenance of the Bobcat attachment.



SERVICE MANUAL

6904107

Complete maintenance and overhaul instructions for your Bobcat attachment.

BACKHOE ATTACHMENT OPERATOR TRAINING COURSE

6900329

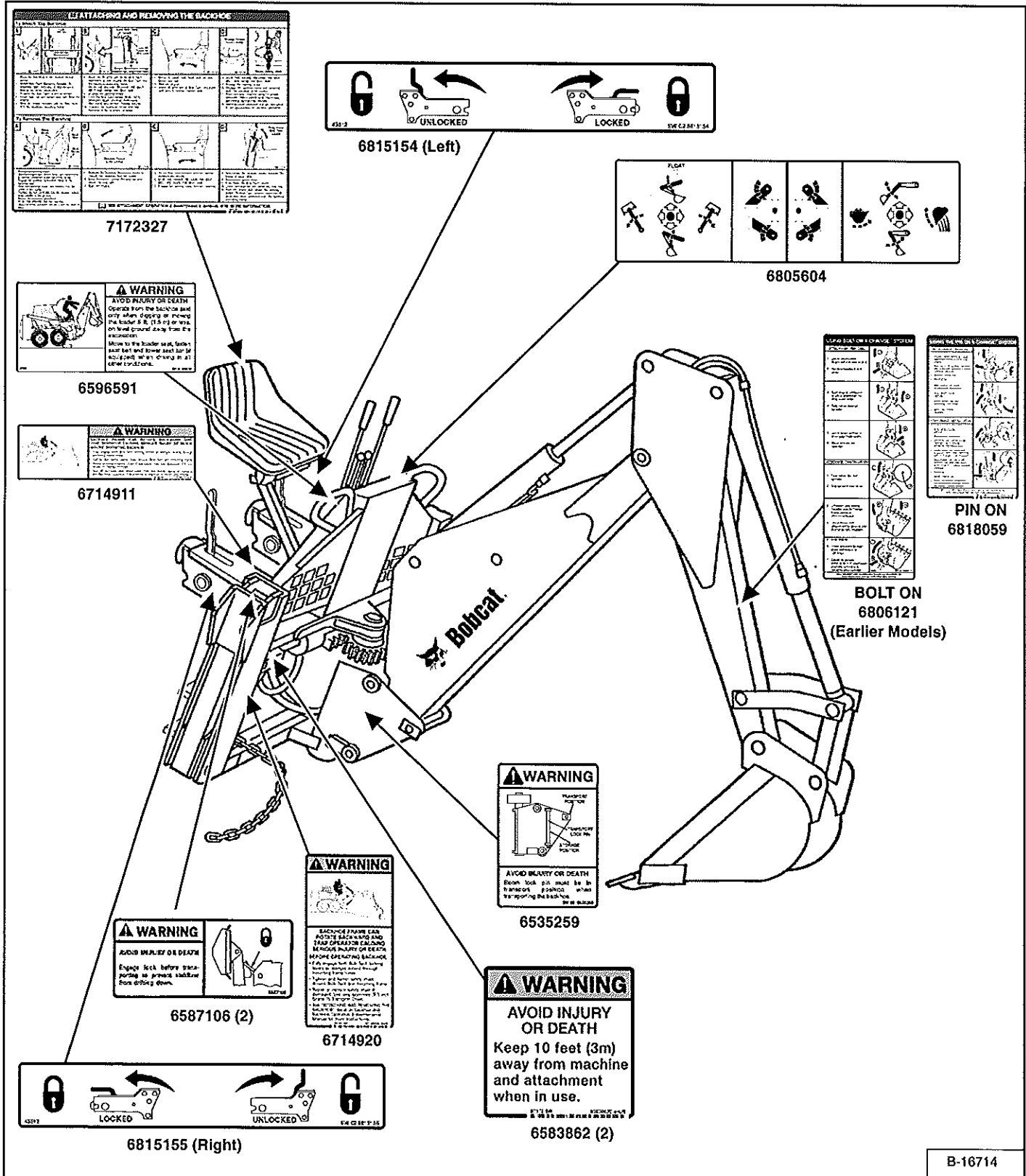


- Introduces operator to step-by-step basics of Bobcat Backhoe Attachment operation. Also available in Spanish P/N 6900585.

ATTACHMENT SIGNS (DECALS)

Follow the instructions on all the Attachment Signs (Decals) that are on the attachment. Replace any damaged attachment signs and be sure they are in the correct locations. Attachment signs are available from your Bobcat attachment dealer.

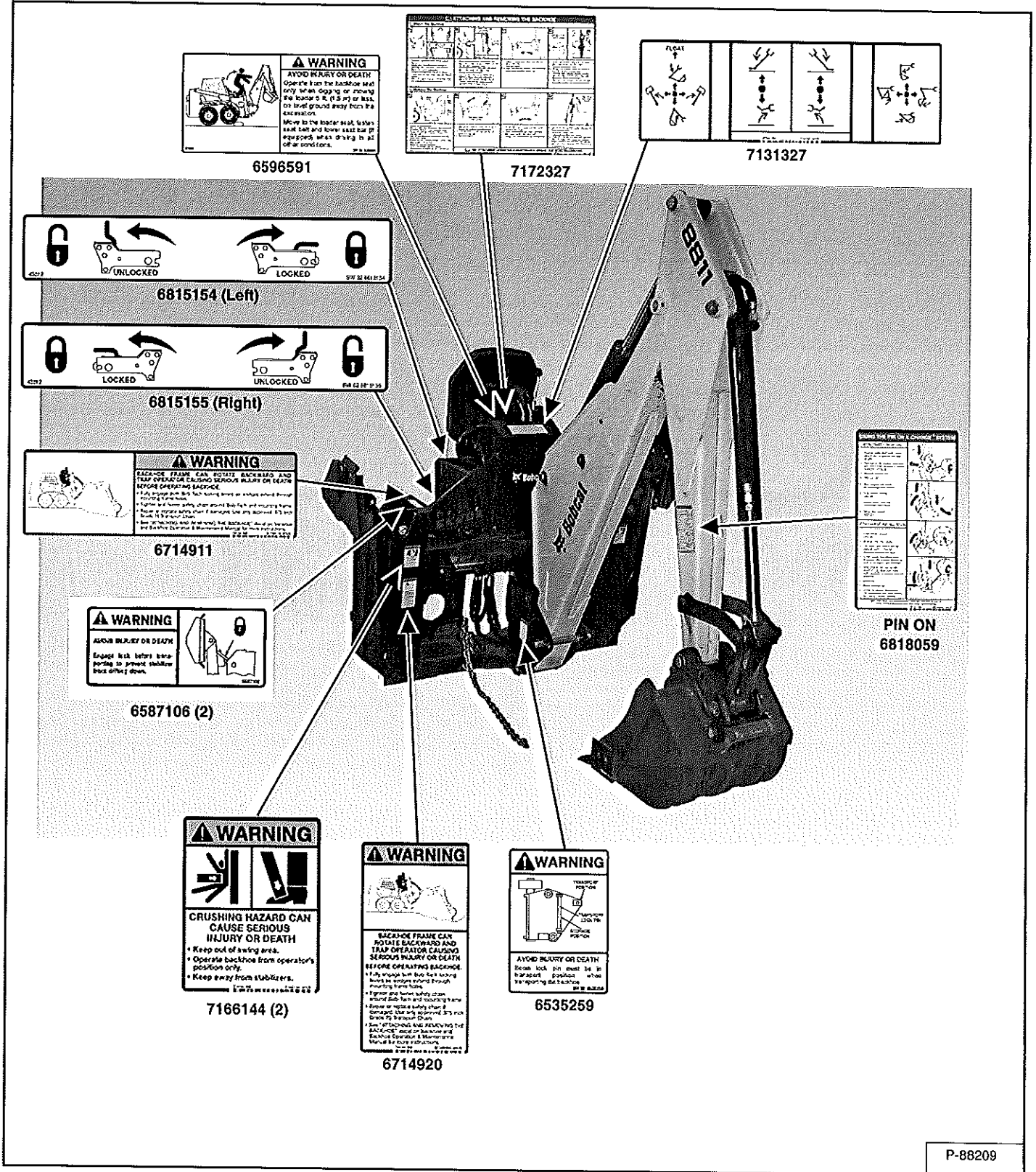
S/N 630100101 & Above, S/N A55809999 & Below



ATTACHMENT SIGNS (DECALS) (CONT'D)

Follow the instructions on all the Attachment Signs (Decals) that are on the attachment. Replace any damaged attachment signs and be sure they are in the correct locations. Attachment signs are available from your Bobcat attachment dealer.

S/N A55810000 & Above





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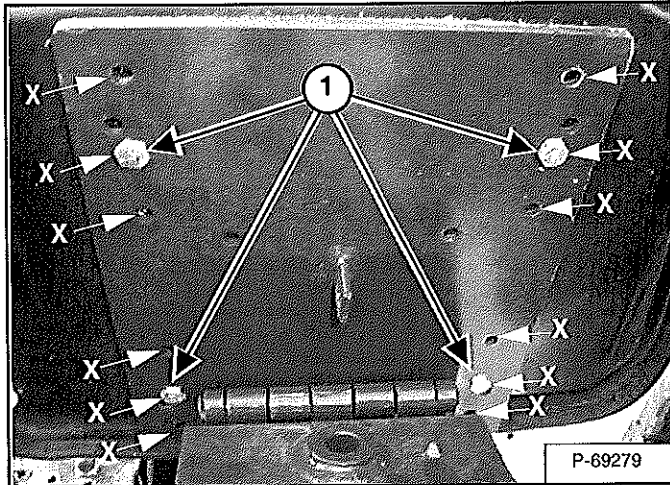
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INITIAL SETUP

Seat Adjustment

Adjust the seat position for comfortable operation of the control levers before operation of the backhoe.

Figure 6



Four bolts (item 1) [Figure 6] hold the seat to the mounting plate.

There are three sets of holes (X) [Figure 6] in the mounting plate (total of 12 holes).

Adjust the seat to the desired position.

Tighten the bolts to 28 - 31 N•m (21 - 23 ft-lb) torque.

Adjust as needed for each different operator.

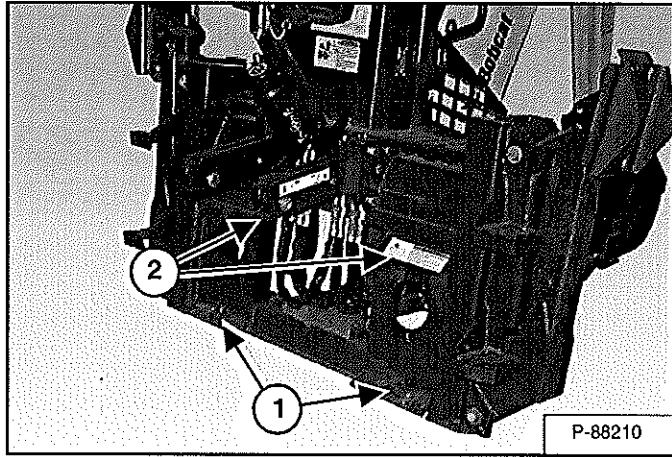
Loader Mount Kit

Install the required loader mount kit. Additional kits may be required. See your Bobcat dealer for available kits.

DAILY INSPECTION

Attachment Mounting Frame

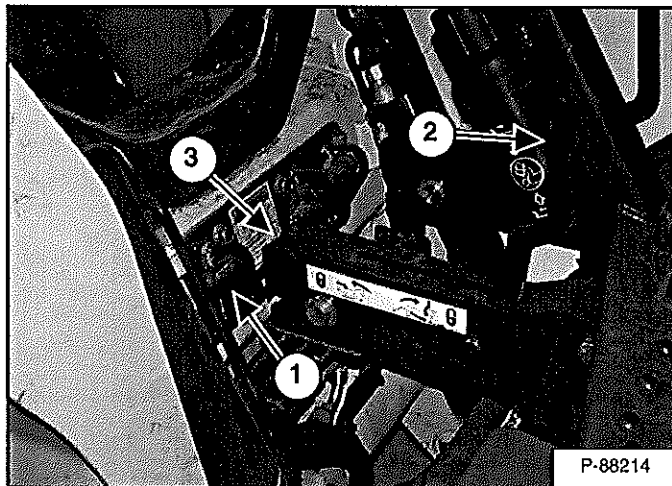
Figure 7



Inspect the Bob-Tach wedge mounts (Item 1), mounting flange (Item 2) [Figure 7] and all welds on the backhoe for wear and damage each time the backhoe is removed from the machine.

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

Figure 8



Check the backhoe mounting pins (Item 1) [Figure 8] for damage or wear (both sides).

Check condition of the backhoe frame locking levers (Item 2) [Figure 8] and linkages (both sides).

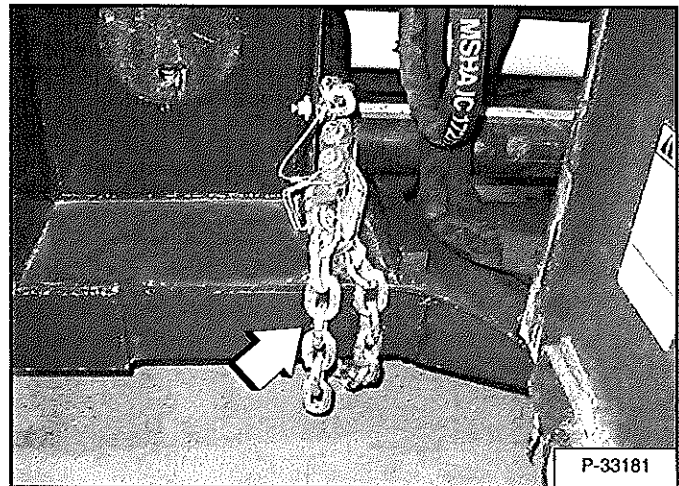
Check the condition of backhoe mounting frame (Item 3) [Figure 8] (both sides).

IMPORTANT

Backhoe mounting bolts and nuts must be kept tightened. Retighten the bolts and nuts after the first 10 minutes of operation and every 8 hours after that.

I-2062-0295

Figure 9

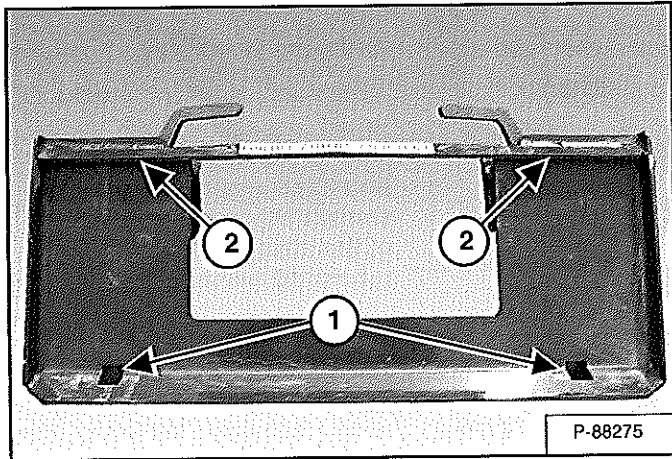


Repair or replace safety chain or retainer pin if damaged or missing. Use only approved 9,525 mm (.375 in) Grade 70 Transport Chain [Figure 9].

DAILY INSPECTION (CONT'D)

8811 Backhoe Bob-Tach Adapter Kit (if equipped)

Figure 10



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

Frequently inspect the adapter 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

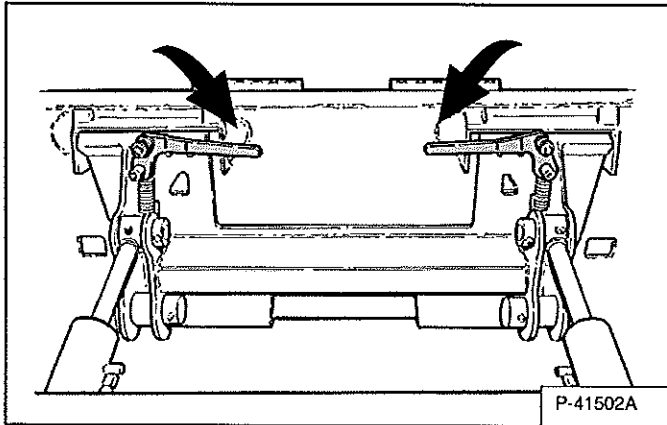
! WARNING

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

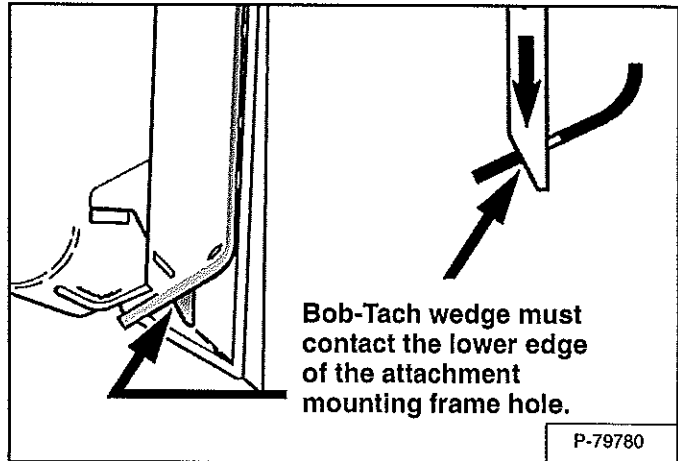
Figure 11



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 11] (wedges fully extended through the attachment mounting frame holes).

The levers and wedges must move freely [Figure 11].

Figure 12



Bob-Tach wedge must contact the lower edge of the attachment mounting frame hole.

The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 12].

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.)

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 13

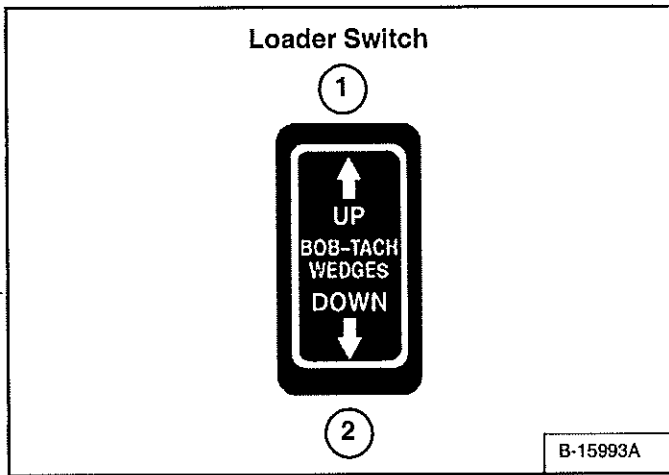
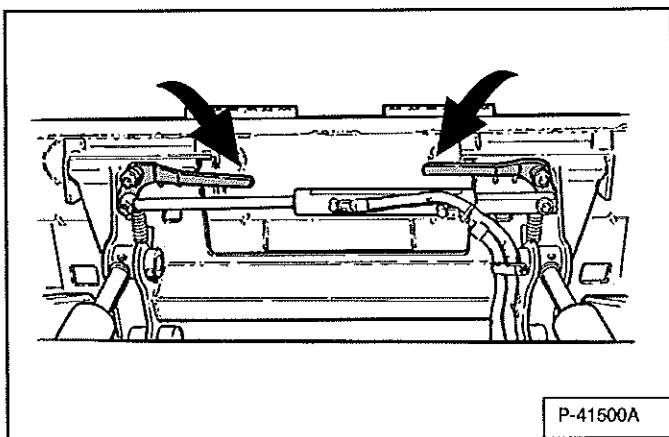
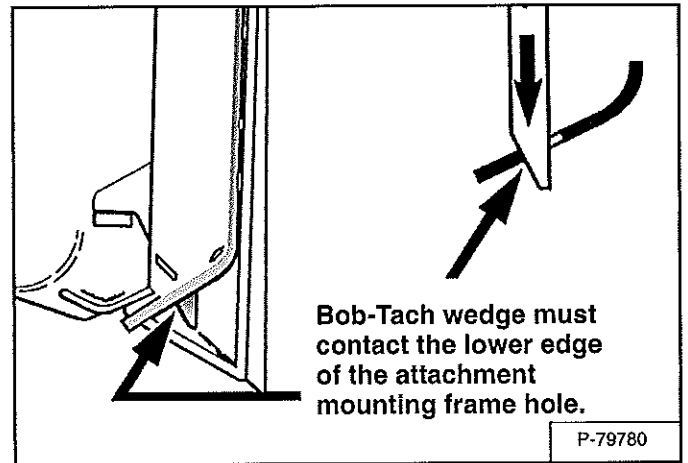


Figure 14



Push and hold the BOB-TACH "WEDGES DOWN" switch (Item 2) [Figure 13] and [Figure 14] until the levers are fully engaged in the locked position [Figure 14] (wedges fully extended through the attachment mounting frame holes).

Figure 15



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 15].

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.

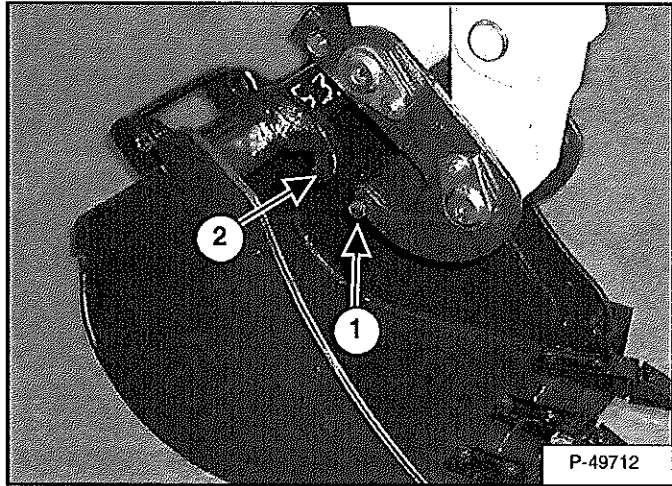
Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)

DAILY INSPECTION (CONT'D)

X-Change™

Bolt-On X-Change

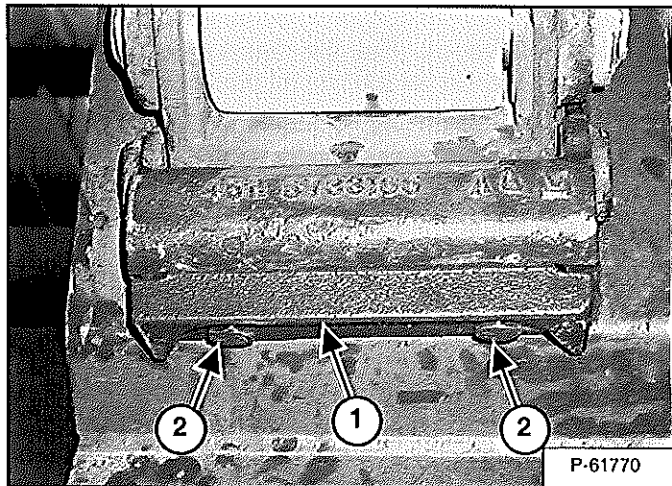
Figure 16



Inspect the X-Change for wear or damage. Inspect the X-Change pins (Item 1) and hooks (Item 2) [Figure 16] (on the attachment) for wear or damage.

Repair or replace damaged parts.

Figure 17

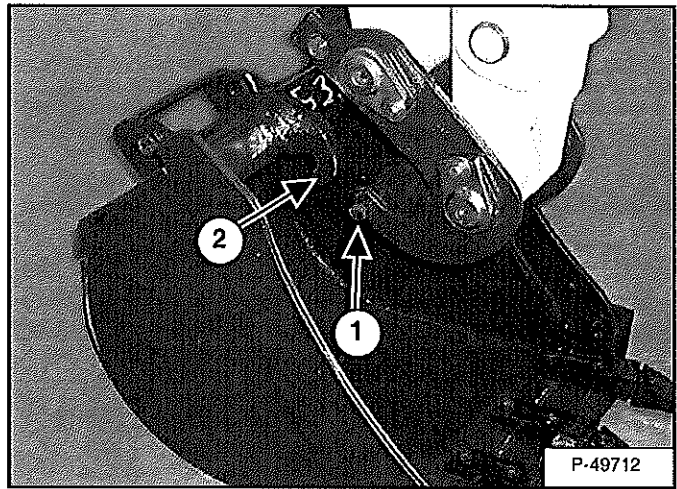


Check the plate (Item 1) for any wear or damage. Re-torque the bolts (Item 2) [Figure 17] to 170 - 190 N•m (125 - 140 ft-lb) after every eight hours of operation.

Repair or replace damaged parts.

Pin-On X-Change

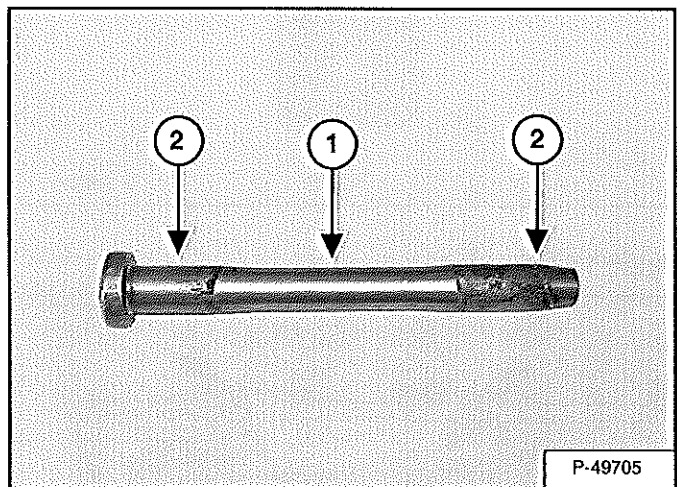
Figure 18



Inspect the X-Change for wear or damage. Inspect the X-Change pins (Item 1) and hooks (Item 2) [Figure 18] (on the attachment) for wear or damage.

Repair or replace damaged parts.

Figure 19



Inspect the pin (Item 1) [Figure 19] for wear or damage. Replace the pin as needed.

Apply a light coat of grease to the ends of the pin (Item 2) [Figure 19].

OPERATING PROCEDURE WITH LOADERS

Approved Loader Models And Requirements

Figure 20

LOADER MODEL	8811 BACKHOE
A300	X
*A770	X
S220	X
S250	X
S300	X
S330	X
*S630	X
*S650	X
*S750	X
*S770	X
*S850	X
T250	X
T300	X
T320	X
*T630	X
*T650	X
*T750	X
*T770	X
*T870	X

X = Approved

* = 8811 Backhoe Bob-Tach Adapter Kit required.

The chart [Figure 20] lists the loader models approved for use with the 8811 backhoe.

See installation instruction for the 8811 Backhoe Bob-Tach Adapter Kit 7168932 (if required). (See INSTALLATION INSTRUCTIONS on Page II-1.)

NOTE: Additional kits are required for proper operation of the 8811 backhoe. See your Bobcat dealer for available kits.

The warranty is void if this attachment is used on a non-approved carrier. See your Bobcat dealer for an updated list of approved carriers.

WARNING

Never use attachments or buckets which are not approved by the Bobcat Company. Attachments and buckets for safe loads of specified densities are approved for each model. Unapproved attachments and buckets can cause injury or death.

W-2662-0108

Auxiliary Hydraulics

Figure 21

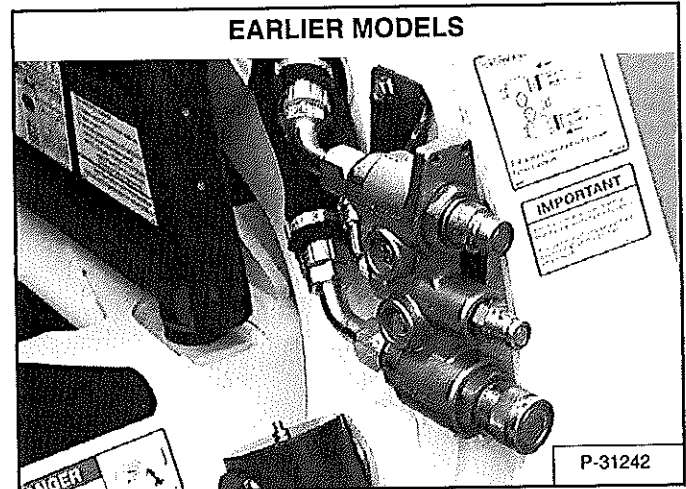
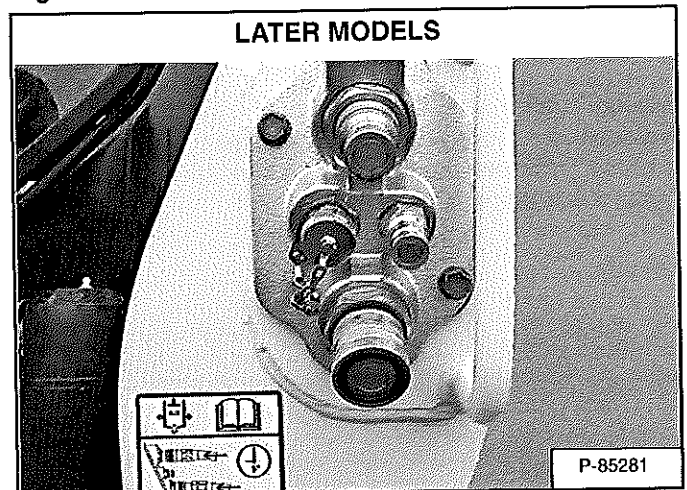


Figure 22



The loader must be equipped with front auxiliary hydraulics [Figure 21] or [Figure 22] for proper operation of the backhoe. See your Bobcat dealer for available kits.

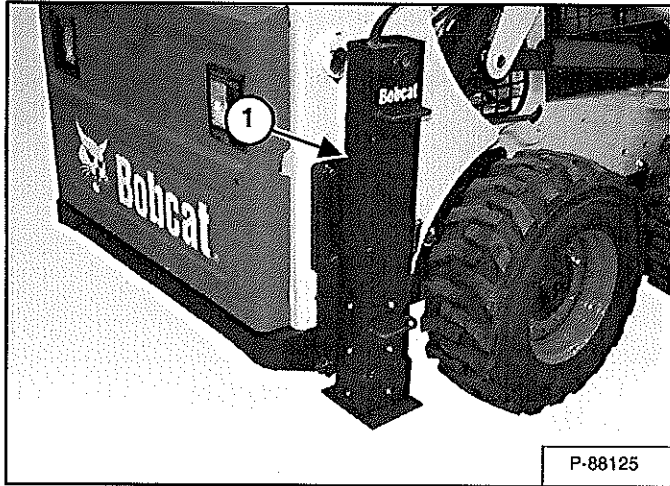
The warranty is void if this attachment is used on a non-approved carrier. See your Bobcat dealer for an updated list of approved carriers.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Approved Loader Models & Requirements (Cont'd)

Rear Stabilizers

Figure 23



Optional rear stabilizers (Item 1) [Figure 23] are available for your loader to increase the backhoe operation performance and versatility. See your Bobcat dealer for available kits.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Machine / Attachment Setup

Install the required kits for mounting the 8811 backhoe.
(See Approved Loader Models And Requirements on Page 31.)

IMPORTANT

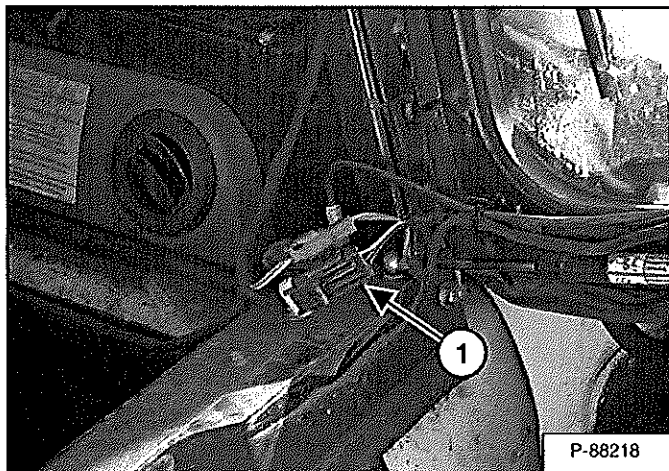
Do not mount this backhoe on a loader which has a cab door installed.

Remove the cab door before mounting the backhoe.
I-2071-0495

Removing Cab Door (If Equipped)

NOTE: The following pictures may not show your loader exactly as it appears but the procedure is the same.

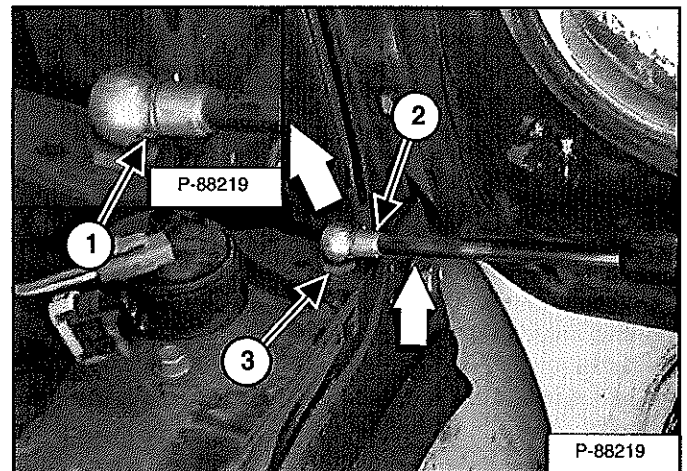
Figure 24



Open loader door.

Disconnect all electrical connections (Item 1) [Figure 24] running to the door.

Figure 25



Remove the retaining clip (Item 1) [Figure 25].

Remove the gas spring (Item 2) by lifting up, removing from the mounting post (Item 3) [Figure 25].

Install the retaining clip into the gas spring.

Figure 26



NOTE: A second person is recommended to help remove the cab door.

Lift the door (Item 1) upward until clear of the mounting pins (Item 2) [Figure 26].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Entering And Exiting The Loader

WARNING

AVOID INJURY OR DEATH

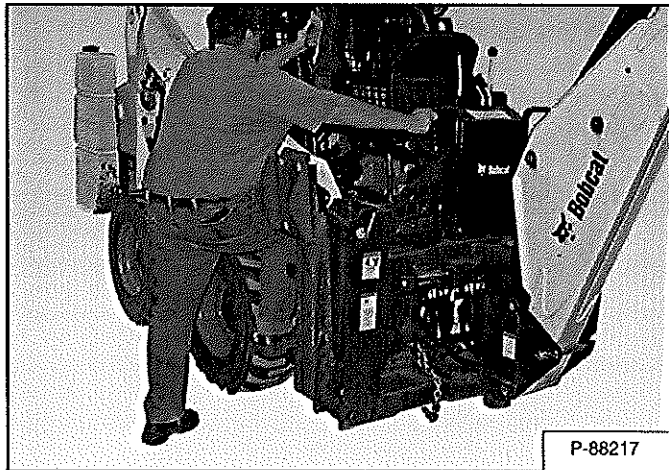
When operating the machine:

- Keep the seat belt fastened snugly.
- The seat bar must be lowered.
- Keep your feet on the pedal controls or footrests and hands on the controls.

W-2261-0909

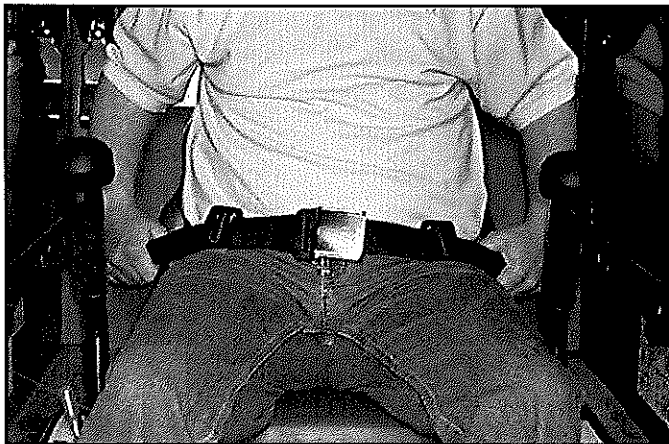
Entering

Figure 27



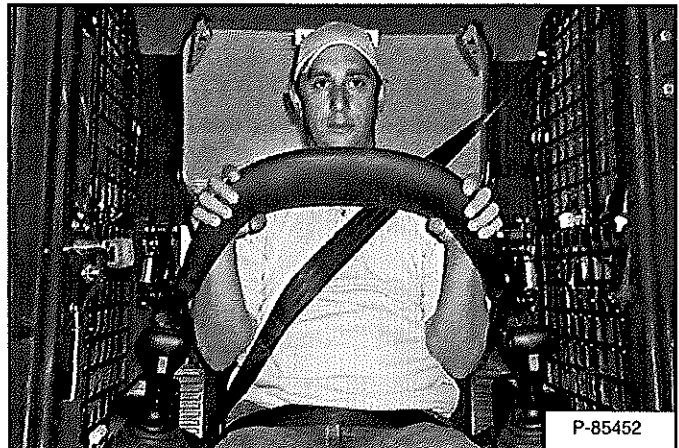
Use the attachment steps, grab handles and safety treads (on the loader lift arms and frame) to get on and off the loader / backhoe [Figure 27]. Do not jump.

Figure 28



Enter the loader. Fasten the seat belt and adjust it so the buckle is centered between your hips [Figure 28].

Figure 29



Lower the seat bar and engage the parking brake [Figure 29].

Put the foot pedals or hand controls in neutral position.

NOTE: Keep your hands on the steering levers and your feet on the foot pedals (or footrests) while operating the loader.

(See the loader's Operation & Maintenance Manual and Operator's Handbook for detailed information on operating the loader.)

Exiting

Lower the lift arms and put the attachment flat on the ground.

Stop the engine and engage the parking brake.

Lift the seat bar and make sure the lift and tilt functions are deactivated.

Remove the key.

Exit the loader.

WARNING

AVOID INJURY OR DEATH

Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2722-0208

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation

NOTE: When installing the 8811 Backhoe on a loader, a Backhoe Bob-Tach adapter kit is required on some models. (See INSTALLATION INSTRUCTIONS on Page II-1.)

Hand Lever Bob-Tach

NOTE: The illustrations and instructions provided explain how to install the 8811 backhoe attachment on to a loader.

The attachment mounting frame for the attachment has a top flange that is designed to receive the top edge of the Bob-Tach and the lower part of the frame is designed to receive the Bob-Tach wedges.

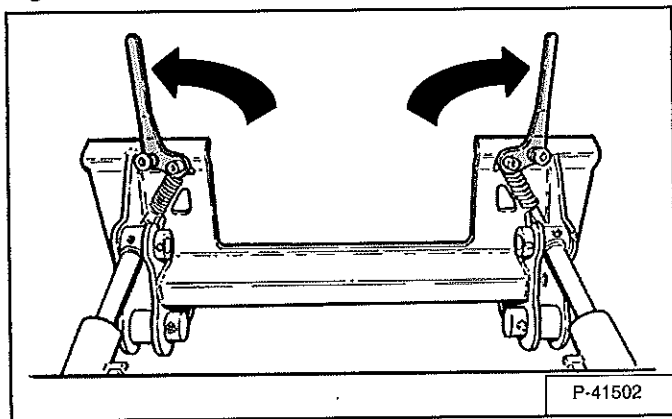
WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause serious injury or death.

W-2744-0608

Always inspect the loader's Bob-Tach and the attachment mounting frame before installation. See the loader's Operation & Maintenance Manual. (See DAILY INSPECTION on Page 26.)

Figure 30

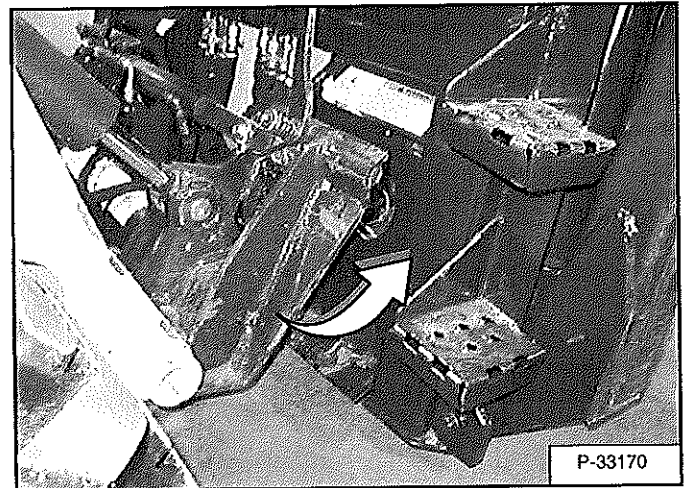


Pull the Bob-Tach levers up until they are fully raised (wedges fully raised) [Figure 30].

Enter the loader. (See Entering And Exiting The Loader on Page 34.)

Start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Figure 31

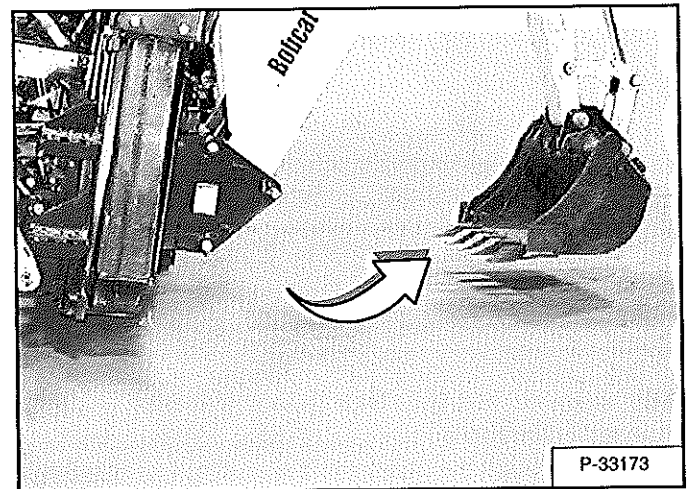


Lower the lift arms and tilt the Bob-Tach forward.

Drive the loader slowly forward until the top edge of the Bob-Tach is completely under the top flange of the backhoe mounting frame [Figure 31].

NOTE: Be sure the Bob-Tach levers do not hit the attachment.

Figure 32



Tilt the Bob-Tach backward until the backhoe is slightly off the ground [Figure 32]. This will cause the backhoe mounting frame to fit up against the front of the Bob-Tach.

NOTE: When leaving the operator's seat to install an attachment, tilt the attachment until it is slightly off the ground.

Stop the engine and exit the loader. (See Entering And Exiting The Loader on Page 34.)

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Entering And Exiting The Loader

! WARNING

AVOID INJURY OR DEATH

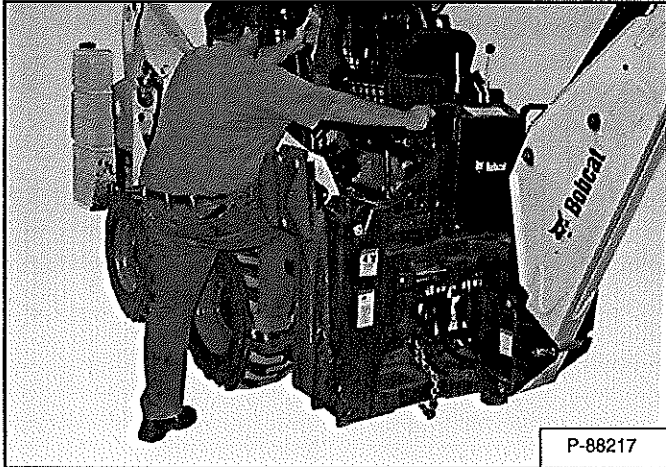
When operating the machine:

- Keep the seat belt fastened snugly.
- The seat bar must be lowered.
- Keep your feet on the pedal controls or footrests and hands on the controls.

W-2261-0909

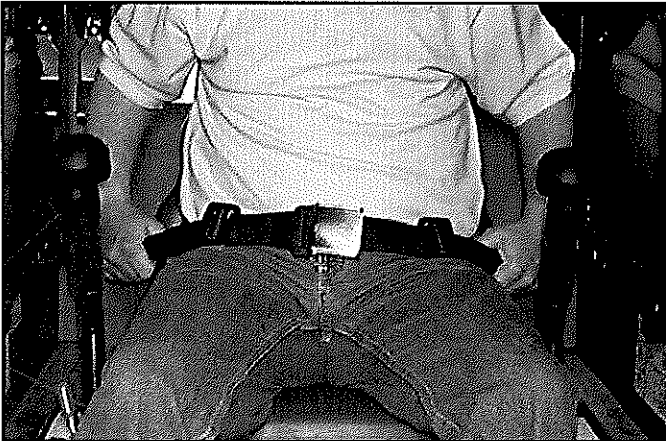
Entering

Figure 27



Use the attachment steps, grab handles and safety treads (on the loader lift arms and frame) to get on and off the loader / backhoe [Figure 27]. Do not jump.

Figure 28



Enter the loader. Fasten the seat belt and adjust it so the buckle is centered between your hips [Figure 28].

Figure 29



Lower the seat bar and engage the parking brake [Figure 29].

Put the foot pedals or hand controls in neutral position.

NOTE: Keep your hands on the steering levers and your feet on the foot pedals (or footrests) while operating the loader.

(See the loader's Operation & Maintenance Manual and Operator's Handbook for detailed information on operating the loader.)

Exiting

Lower the lift arms and put the attachment flat on the ground.

Stop the engine and engage the parking brake.

Lift the seat bar and make sure the lift and tilt functions are deactivated.

Remove the key.

Exit the loader.

! WARNING

AVOID INJURY OR DEATH

Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2722-0208

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation

NOTE: When installing the 8811 Backhoe on a loader, a Backhoe Bob-Tach adapter kit is required on some models. (See **INSTALLATION INSTRUCTIONS** on Page II-1.)

Hand Lever Bob-Tach

NOTE: The illustrations and instructions provided explain how to install the 8811 backhoe attachment on to a loader.

The attachment mounting frame for the attachment has a top flange that is designed to receive the top edge of the Bob-Tach and the lower part of the frame is designed to receive the Bob-Tach wedges.

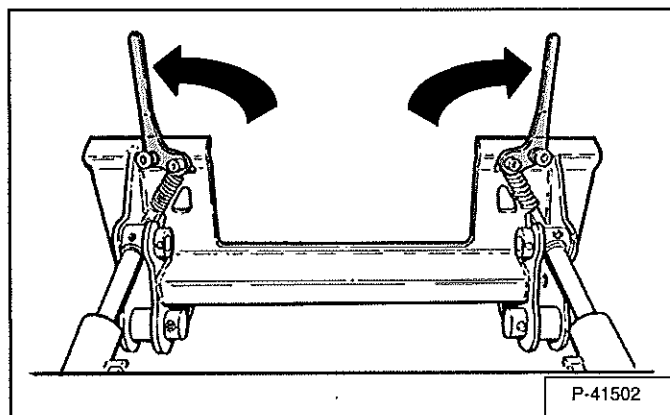


Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause serious injury or death.

W-2744-0608

Always inspect the loader's Bob-Tach and the attachment mounting frame before installation. See the loader's Operation & Maintenance Manual. (See **DAILY INSPECTION** on Page 26.)

Figure 30

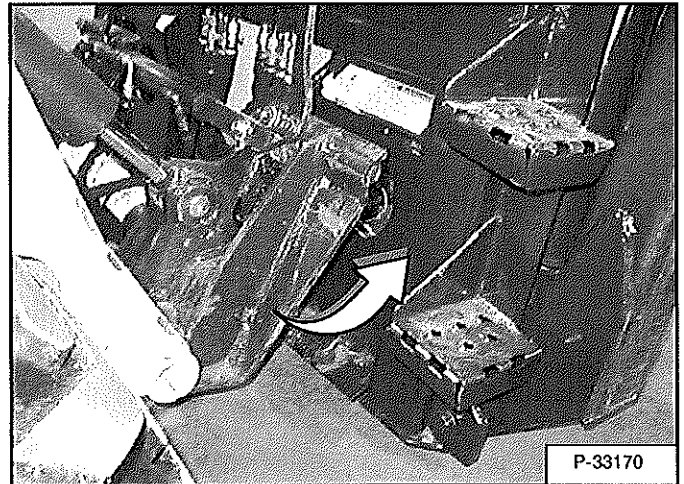


Pull the Bob-Tach levers up until they are fully raised (wedges fully raised) [Figure 30].

Enter the loader. (See **Entering And Exiting The Loader** on Page 34.)

Start the engine, press the **PRESS TO OPERATE LOADER** button and release the parking brake.

Figure 31

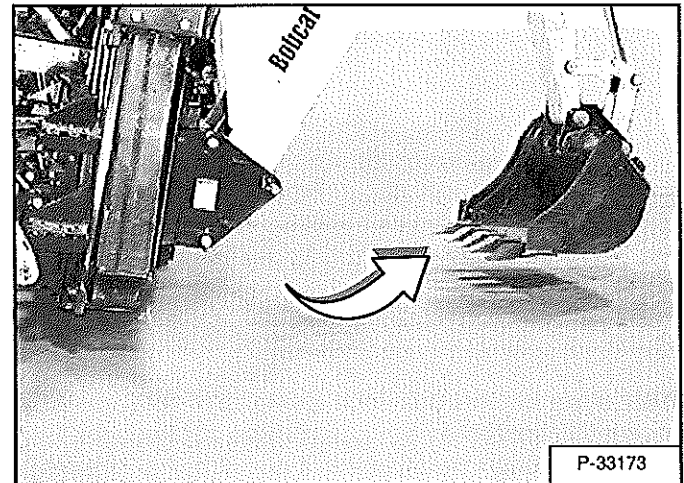


Lower the lift arms and tilt the Bob-Tach forward.

Drive the loader slowly forward until the top edge of the Bob-Tach is completely under the top flange of the backhoe mounting frame [Figure 31].

NOTE: Be sure the Bob-Tach levers do not hit the attachment.

Figure 32



Tilt the Bob-Tach backward until the backhoe is slightly off the ground [Figure 32]. This will cause the backhoe mounting frame to fit up against the front of the Bob-Tach.

NOTE: When leaving the operator's seat to install an attachment, tilt the attachment until it is slightly off the ground.

Stop the engine and exit the loader. (See **Entering And Exiting The Loader** on Page 34.)

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

Hand Lever Bob-Tach (Cont'd)

! WARNING

AVOID INJURY OR DEATH

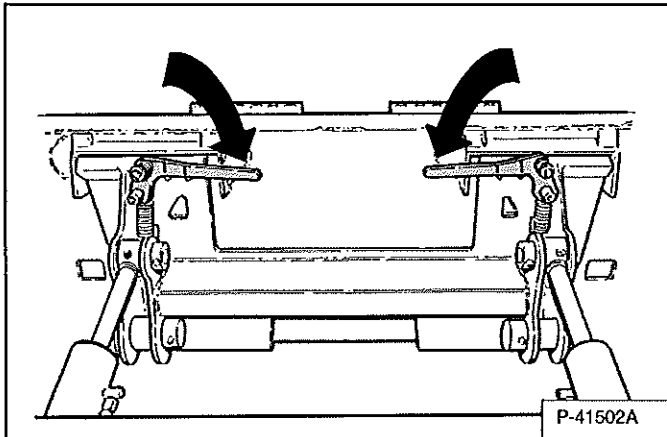
Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

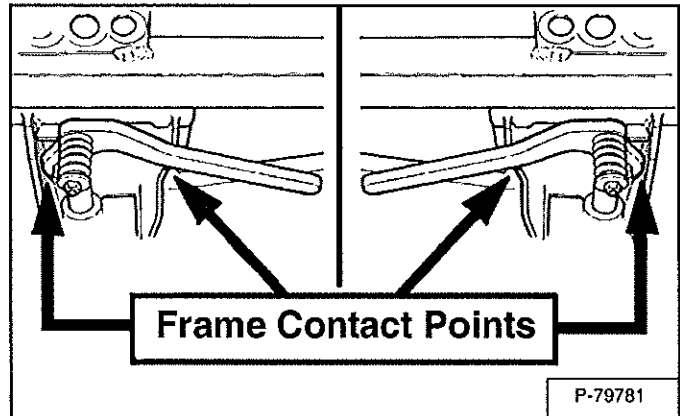
W-2722-0208

Figure 33



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 33] (wedges fully extended through the attachment mounting frame holes).

Figure 34



Both levers must contact the frame as shown when locked [Figure 34].

If both levers do not engage in the locked position, see your Bobcat dealer for maintenance.

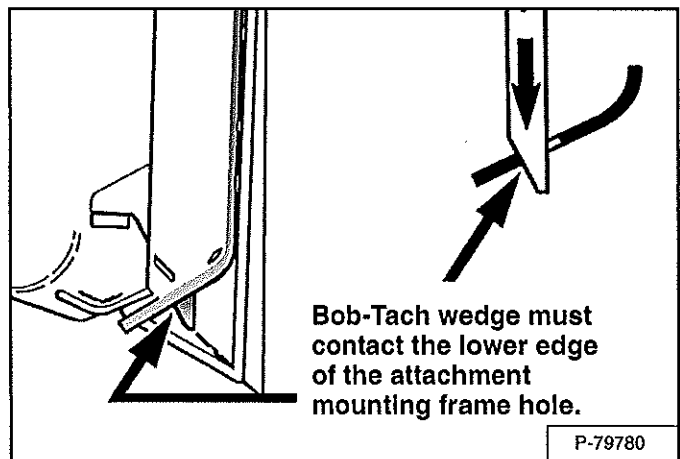
! WARNING

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 35



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 35].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

NOTE: When installing the 8811 Backhoe on a loader, a Backhoe Bob-Tach adapter kit is required on some models. (See **INSTALLATION INSTRUCTIONS** on Page II-1.)

Power Bob-Tach



Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause serious injury or death.

W-2744-0608

This loader may be equipped with a Power Bob-Tach.

Enter the loader. (See **Entering And Exiting The Loader** on Page 34.)

Start the engine, press the **PRESS TO OPERATE LOADER** button and release the parking brake.

Figure 36

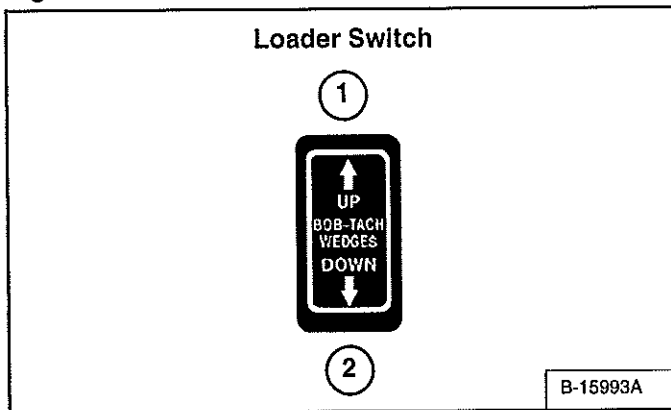
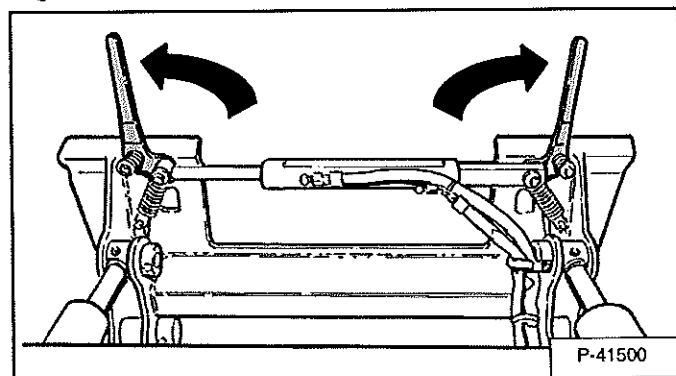
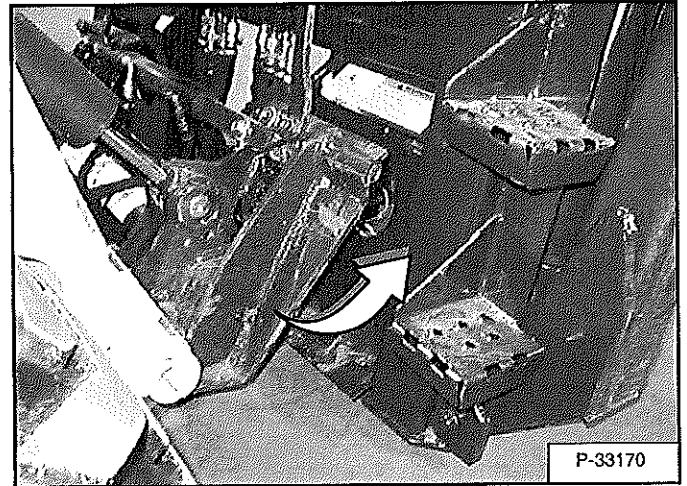


Figure 37



Push and hold the BOB-TACH "WEDGES UP" switch (Item 1) [Figure 36] until the levers are fully raised (wedges fully raised) [Figure 37].

Figure 38

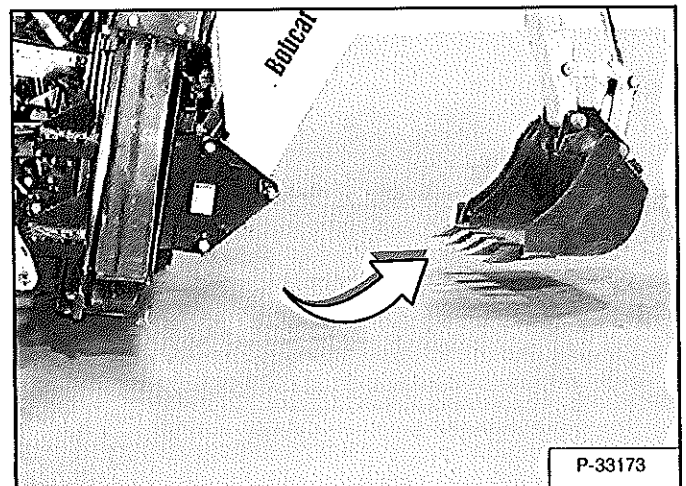


Lower the lift arms and tilt the Bob-Tach slightly forward.

Drive the loader slowly forward until the top edge of the Bob-Tach is completely under the top flange of the backhoe mounting frame [Figure 38].

NOTE: Be sure the Bob-Tach levers do not hit the attachment.

Figure 39



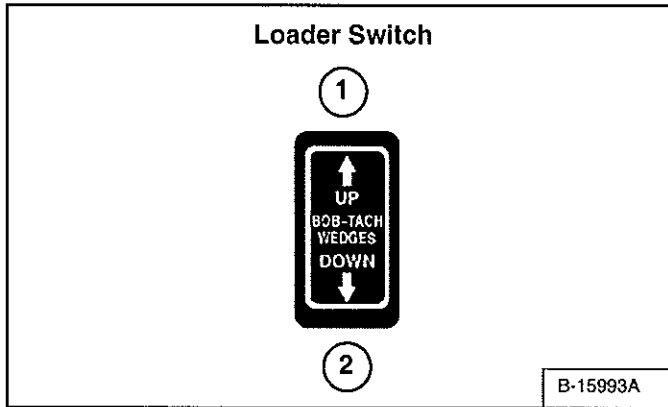
Tilt the Bob-Tach backward until the backhoe is slightly off the ground [Figure 39]. This will cause the backhoe mounting frame to fit up against the front of the Bob-Tach.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

Power Bob-Tach (Cont'd)

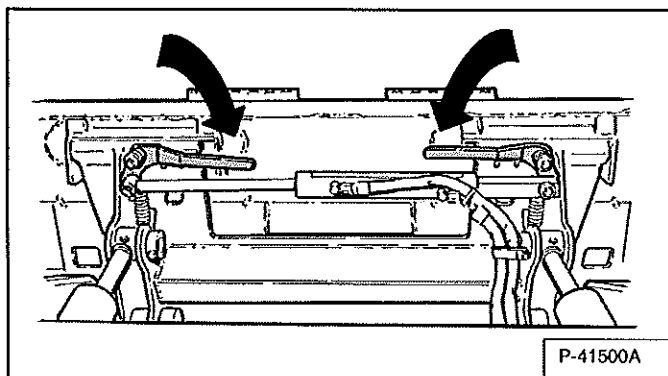
Figure 40



NOTE: The Power Bob-Tach system has continuous pressurized hydraulic oil to keep the wedges in the engaged position and prevent attachment disengagement. Because the wedges can slowly lower, the operator may need to reactivate the switch (BOB-TACH "WEDGES UP") to be sure both wedges are fully raised before installing the attachment.

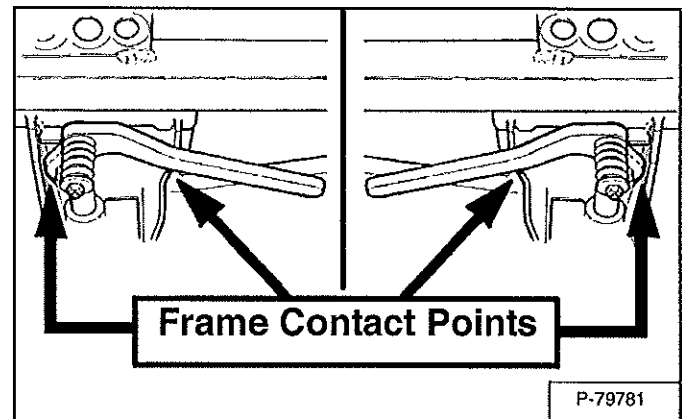
Push and hold the BOB-TACH "WEDGES UP" switch (Item 1) [Figure 40] until the levers are fully raised (wedges fully raised).

Figure 41



Push and hold the BOB-TACH "WEDGES DOWN" switch (Item 2) [Figure 40] until the levers are fully engaged in the locked position [Figure 41] (wedges fully extended through the attachment mounting frame holes).

Figure 42



Both levers must contact the frame as shown when locked [Figure 42].

If both levers do not engage in the locked position, see your Bobcat dealer for maintenance.

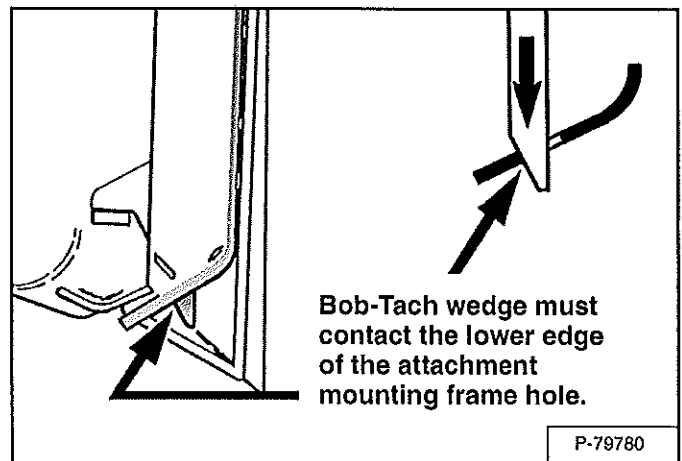


AVOID INJURY OR DEATH

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 43



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 43].

Lower the lift arms and put the attachment flat on the ground.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

Attaching The Backhoe

Stop the engine and exit the loader. (See Entering And Exiting The Loader on Page 34.)

Connect auxiliary hydraulic hoses. (See Hydraulic Quick Couplers on Page 47.)

WARNING

AVOID INJURY OR DEATH

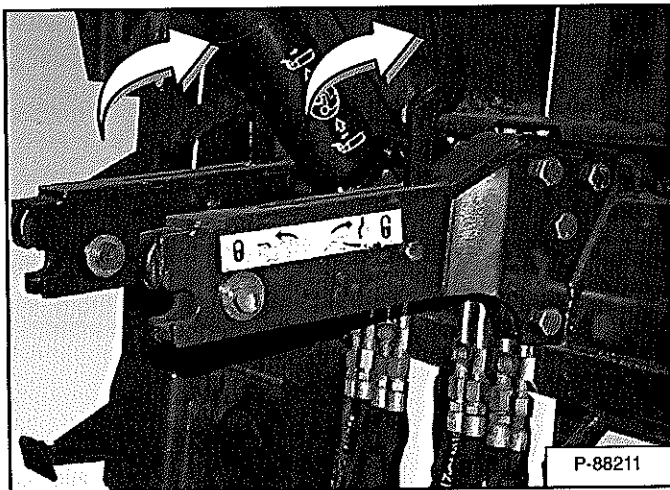
Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2722-0208

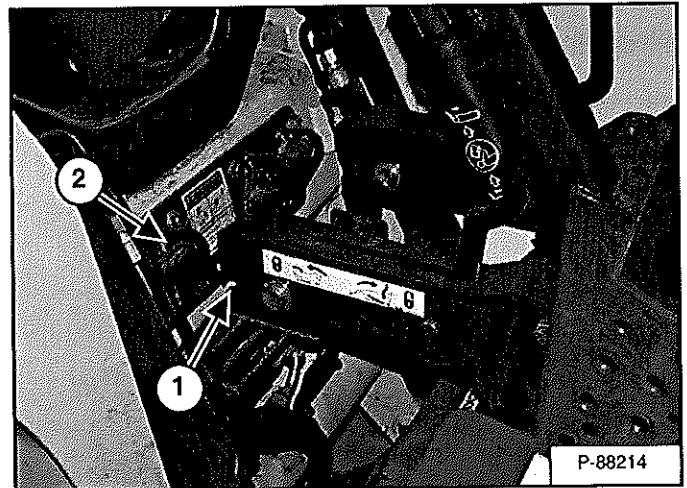
Figure 44



Raise both backhoe locking levers to the unlocked position [Figure 44].

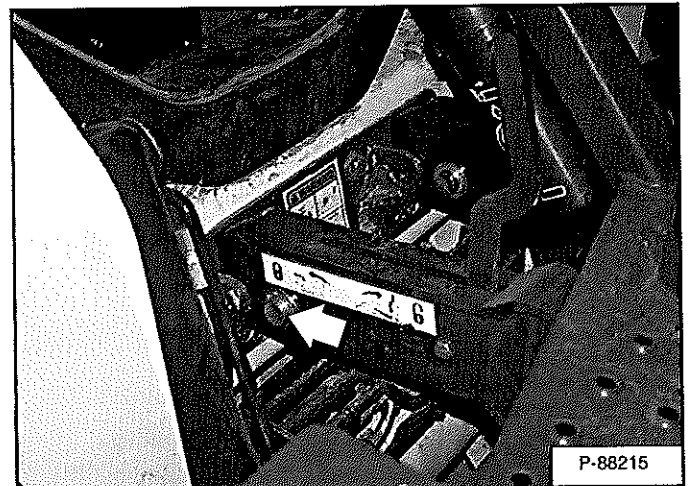
Enter the loader. (See Entering And Exiting The Loader on Page 34.)

Figure 45



Raise the lift arms and tilt the backhoe back to align the frame (Item 1) to the mount (Item 2) [Figure 45].

Figure 46



Tilt the backhoe back until the frame is tight to the mount [Figure 46].

Stop the engine and exit the loader. (See Entering And Exiting The Loader on Page 34.)

WARNING

AVOID INJURY OR DEATH

Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

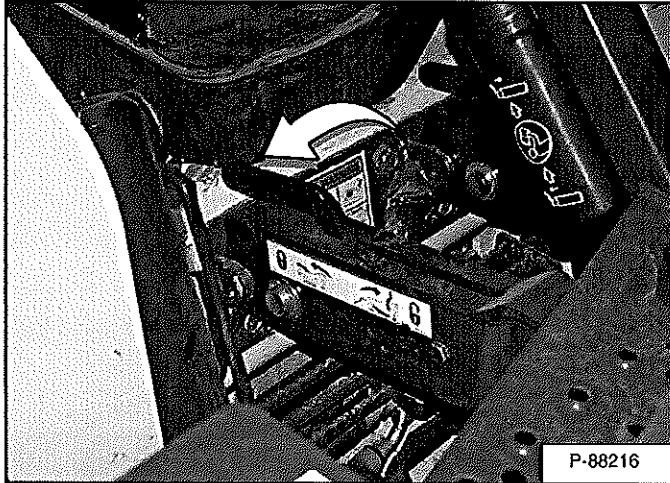
W-2722-0208

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

Attaching The Backhoe (Cont'd)

Figure 47



Engage both backhoe frame lock levers to lock the backhoe on the loader [Figure 47].

WARNING

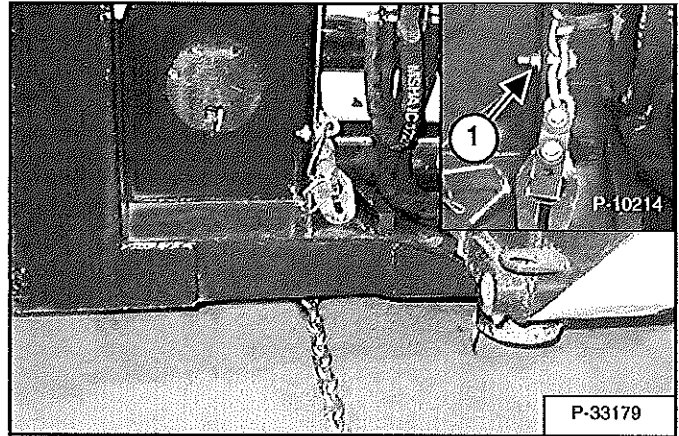
**BACKHOE FRAME CAN ROTATE
BACKWARD AND TRAP OPERATOR
CAUSING SERIOUS INJURY OR DEATH**

Before operating backhoe:

- Fully engage both Bob-Tach locking levers so wedges extend through mounting frame holes.
- Tighten and fasten safety chain around loader Bob-Tach and backhoe mounting frame.
- Repair or replace safety chain if damaged. Use only approved 10 mm (0.375 in) Grade 70 Transport Chain.

W-2771-0910

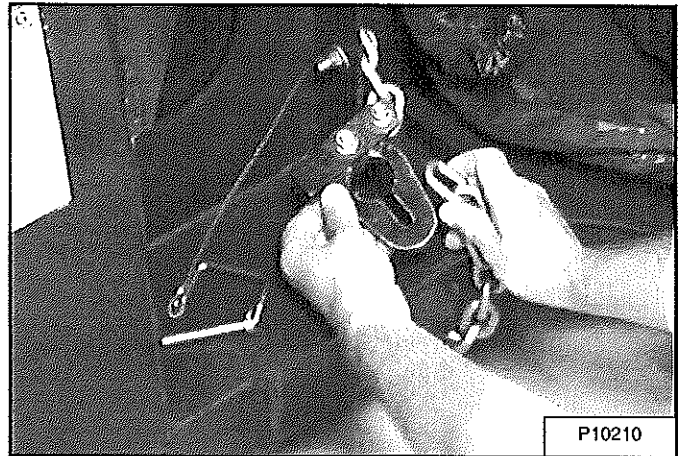
Figure 48



Loop the safety chain around the loader Bob-Tach and backhoe mounting frame [Figure 48].

NOTE: Check the condition of the bolt (Item 1) [Figure 48]. Replace bolt if damaged or missing.

Figure 49



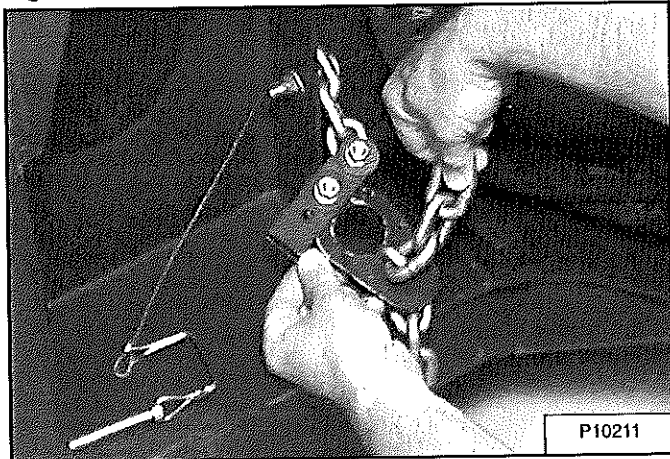
Hold the latch open and install the chain from the bottom, through the opening in the bracket [Figure 49].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

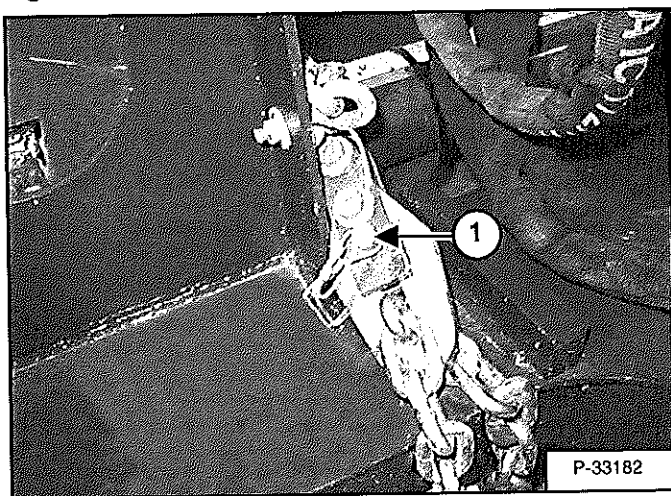
Attaching The Backhoe (Cont'd)

Figure 50



Pull the chain through the opening in the bracket as tight as possible and slide the chain link into the bracket slot [Figure 50].

Figure 51



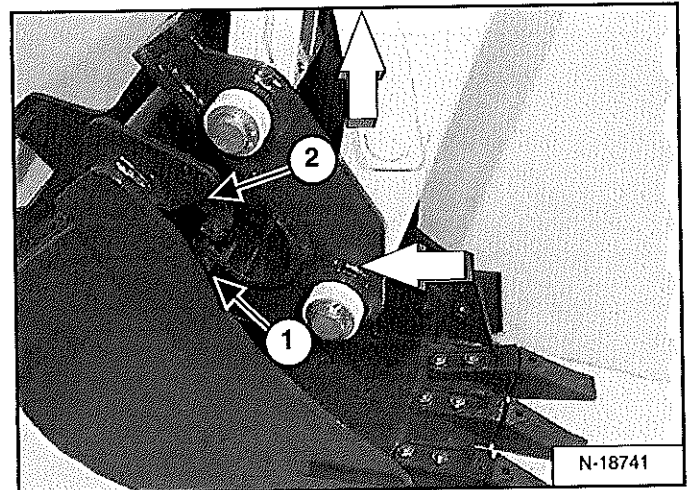
Position the latch over the hole in the bracket.

Install the retaining pin (Item 1) [Figure 51] through the latch and install the clip.

Install The Bucket (Bolt-On X-Change) (If Equipped)

Refer to the control function section before installing the bucket on the loader / backhoe. (See Control Functions on Page 48.)

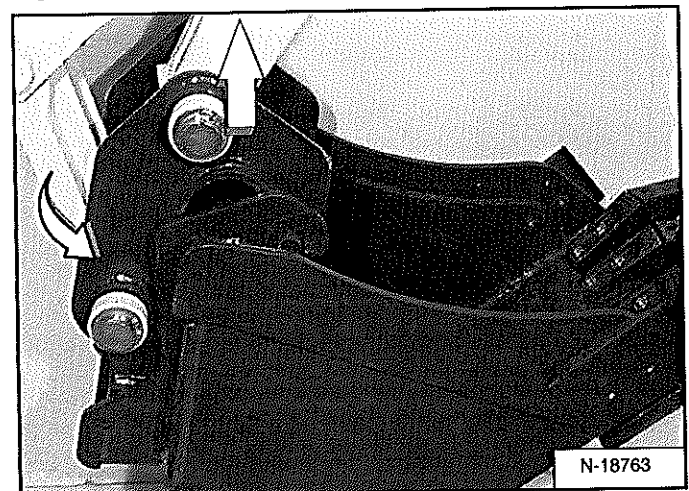
Figure 52



Fully retract the bucket cylinder.

Move the arm towards the bucket. Raise the boom until the pins (Item 1) engage the hooks (Item 2) [Figure 52] on the bucket.

Figure 53



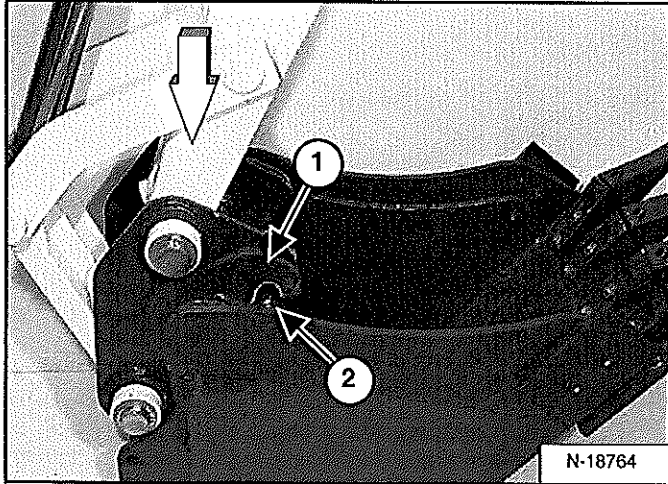
Lift the boom and extend the bucket cylinder until the X-Change frame contacts the back of the bucket [Figure 53].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

Install The Bucket (Bolt-On X-Change) (If Equipped) (Cont'd)

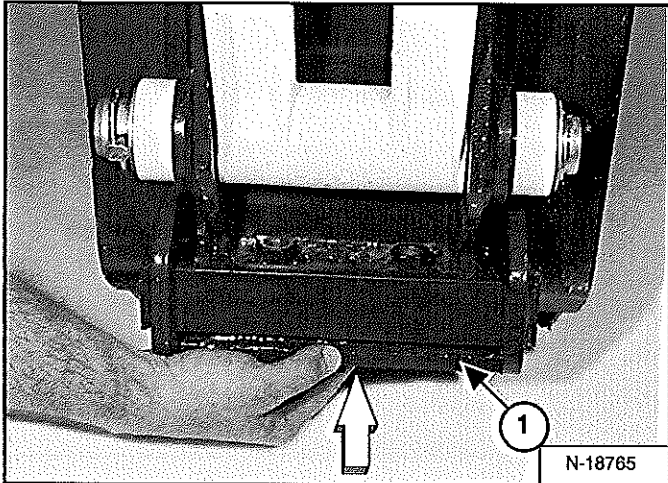
Figure 54



Lower the boom and bucket until the hooks (Item 1) disengage the pins (Item 2) [Figure 54] on the X-Change and the X-Change is fully engaged in the bucket.

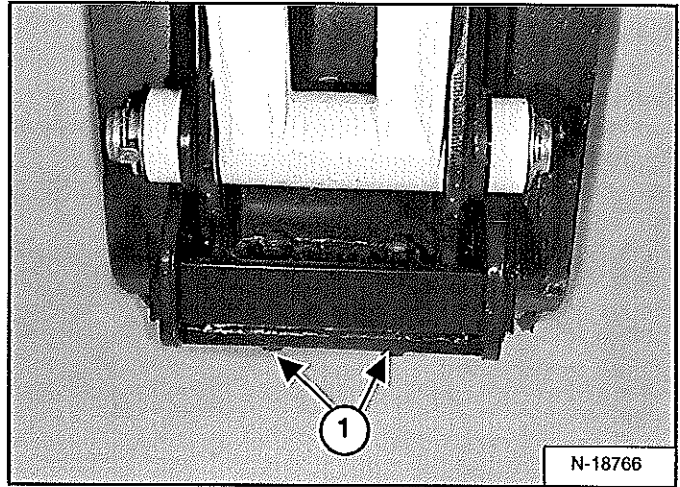
Stop the engine.

Figure 55



Install the plate (Item 1) [Figure 55] on the X-Change.

Figure 56



Install the two bolts (Item 1) [Figure 56] through the plate and into the X-Change.

Tighten the bolts (Item 1) [Figure 56] to 177 N•m (130 ft-lb) torque. Check bolt torque after every eight hours of operation.

WARNING

Keep all bystanders 6 m (20 ft) away from equipment when operating. Contact with moving parts, a trench cave-in or flying objects can cause injury or death.

W-2119-0910

After installation, lift the boom approximately three feet and fully extend and retract the bucket cylinder to ensure the bucket is securely attached to the X-Change.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

Install The Bucket (Pin On X-Change) (If Equipped)

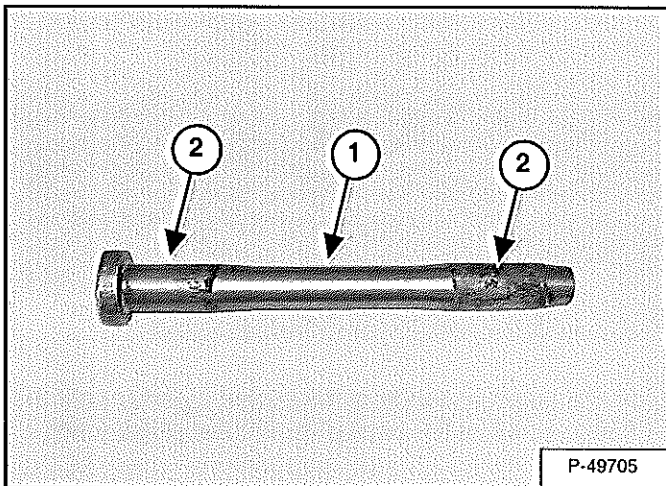
WARNING

AVOID INJURY OR DEATH

Never use attachments or buckets which are not approved by Bobcat Company. Buckets and attachments for safe loads of specified densities are approved for each model. Unapproved attachments can cause injury or death.

W-2052-0907

Figure 57

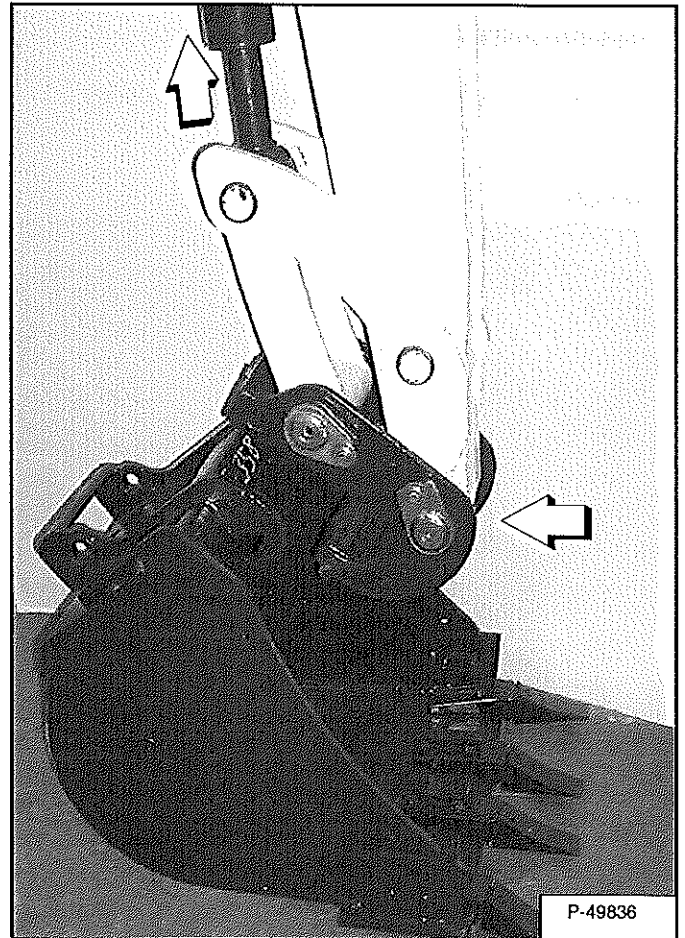


Inspect the pin (Item 1) [Figure 57] for wear or damage. Replace the pin as needed.

Apply a light coat of grease to the ends of the pin (Item 2) [Figure 57].

Refer to the control function section before installing the bucket on the loader / backhoe. (See Control Functions on Page 48.)

Figure 58



Fully retract the bucket cylinder.

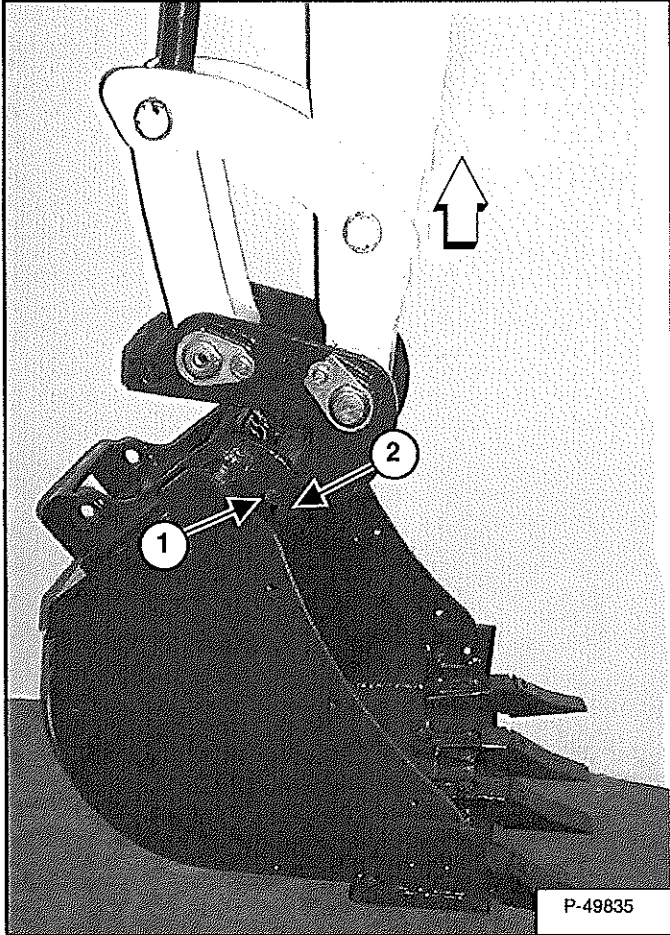
Start the engine and move the arm toward the bucket [Figure 58].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

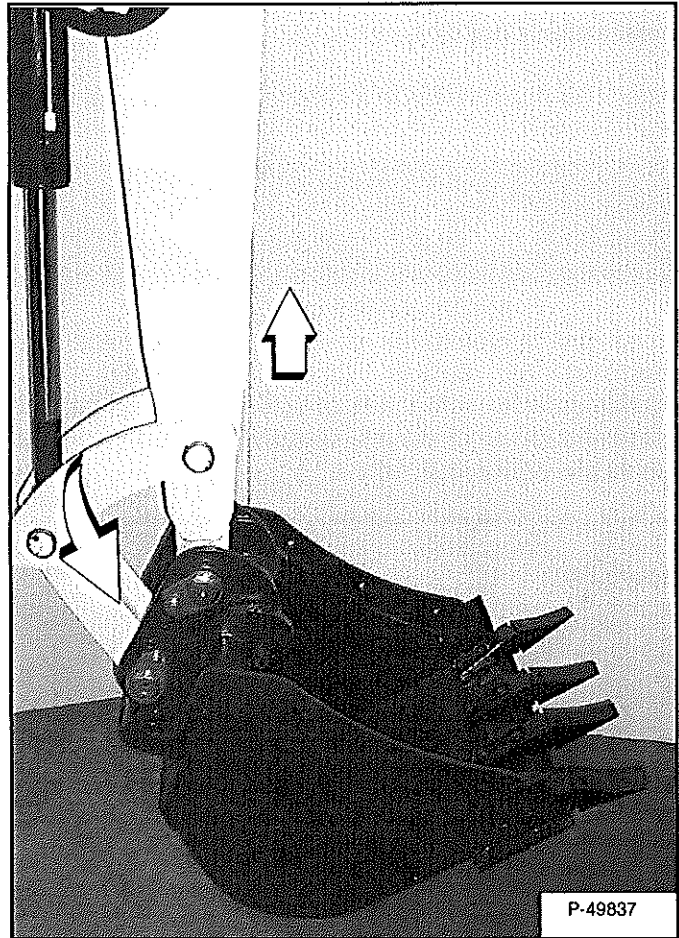
*Install The Bucket (Pin On X-Change) (If Equipped)
(Cont'd)*

Figure 59



Raise the boom until the pins (Item 1) engage the hooks (Item 2) [Figure 59] on the bucket.

Figure 60



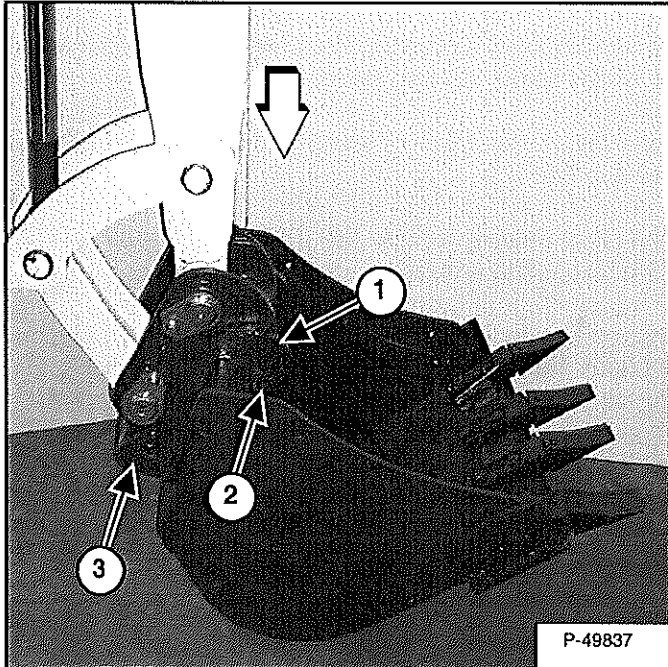
Raise the boom and extend the bucket cylinder until the X-Change contacts the back of the bucket [Figure 60].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

*Install The Bucket (Pin On X-Change) (If Equipped)
(Cont'd)*

Figure 61



With the arm vertical, lower the boom until the hooks (Item 1) of the bucket disengage the pins (Item 2) of the X-Change and the plate (Item 3) [Figure 61] fully engages in the bucket crossmember.

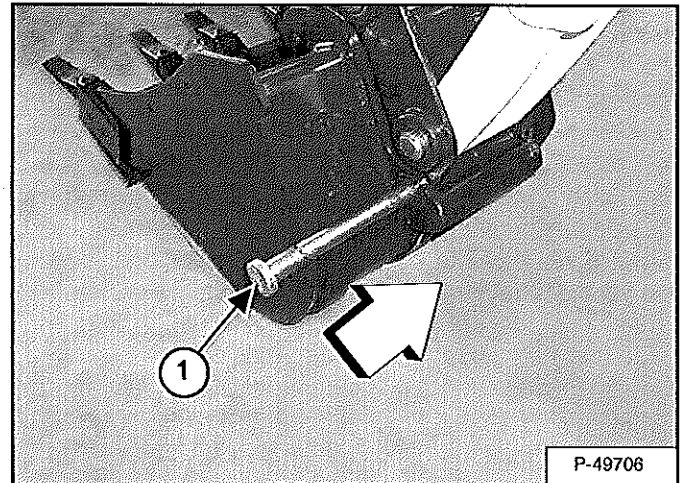
WARNING

Keep all bystanders 6 m (20 ft) away from equipment when operating. Contact with moving parts, a trench cave-in or flying objects can cause injury or death.

W-2119-0910

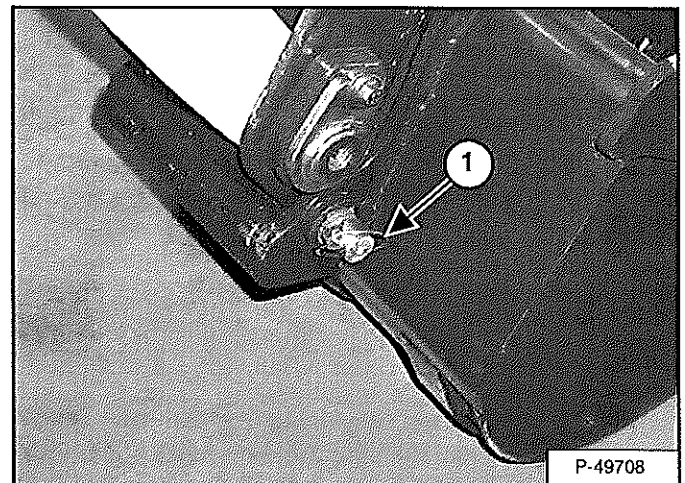
Stop the engine. Move both hydraulic control levers to relieve hydraulic pressure.

Figure 62



Drive the pin (Item 1) [Figure 62] through the bucket mount and X-Change.

Figure 63



Install the retainer pin (Item 1) [Figure 63].

Check for proper installation.

After installation, lift the boom approximately three feet and fully extend and retract the bucket cylinder to ensure the bucket is securely attached to the X-Change.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Installation (Cont'd)

For First Time Installation

New attachments and new loaders are factory equipped with flush face couplers. If installing an attachment equipped with poppet style couplers, the attachment couplers will have to be changed to match the loader. See your Bobcat dealer for parts information.

IMPORTANT

- Thoroughly clean the quick couplers before making connections. Dirt can quickly damage the system.
- Contain and dispose of any oil leakage in an environmentally safe manner.

I-2278-0608

With the loader engine off and using the hose guides (if equipped), route the attachment hydraulic hoses to the loader. Connect the attachment hydraulic quick couplers to the loader couplers. (See Hydraulic Quick Couplers on Page 47.)

Check that the attachment hydraulic hoses are not twisted or contacting any moving parts of the loader or attachment.

NOTE: It may be necessary to loosen the quick couplers on the attachment hydraulic hoses to remove any twists in the hoses.

! 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

Loosen the quick coupler connections on the attachment hydraulic hoses while connected to the loader. Do not remove the quick couplers.

Rotate the attachment hydraulic hoses as needed so the hoses are not twisted or contacting any moving parts of the loader or attachment.

With the twist(s) removed from the hydraulic hoses, tighten the attachment quick coupler connections while the couplers are still connected to the loader. This will help hold the hydraulic hoses in position while tightening.

Tighten the quick couplers connections to 63 N•m (46 ft-lb) torque before starting the loader.

Enter the loader. (See Entering And Exiting The Loader on Page 34.)

Start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Engage auxiliary hydraulics. (See the loader's Operation & Maintenance Manual and Operator's Handbook for correct procedure.)

! WARNING

AVOID INJURY OR DEATH

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a physician familiar with this injury.

W-2072-0807

Check the attachment hydraulic quick coupler connections for leaks.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Hydraulic Quick Couplers

IMPORTANT

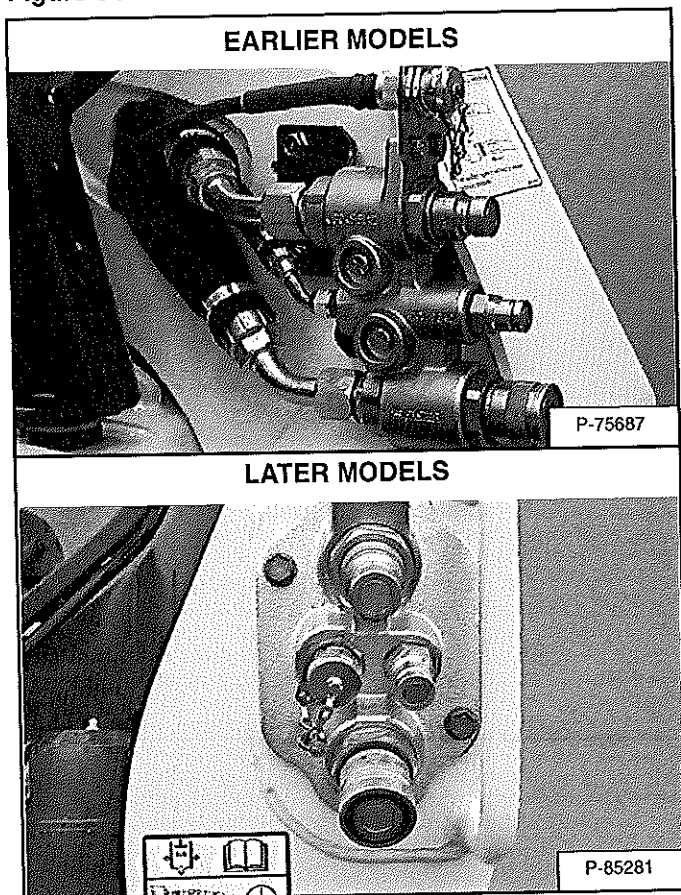
- Thoroughly clean the quick couplers before making connections. Dirt can quickly damage the system.
- Contain and dispose of any oil leakage in an environmentally safe manner.

I-2278-0608

New attachments and new loaders are factory equipped with flush face couplers. If installing an attachment equipped with poppet style couplers, the attachment couplers will have to be changed to match the loader. See your Bobcat dealer for parts information.

NOTE: Make sure the quick couplers are fully engaged. If the quick couplers do not fully engage, check to see that the couplers are the same size and type.

Figure 64



! WARNING

AVOID BURNS

Hydraulic fluid, tubes, fittings and quick couplers can get hot when running machine and attachments. Be careful when connecting and disconnecting quick couplers.

W-2220-0396

To Connect:

Remove any dirt or debris from the surface of both the male and female couplers, and from the outside diameter of the male coupler. Visually check the couplers for corroding, cracking, damage, or excessive wear. If any of these conditions exist, the coupler(s) must be replaced [Figure 64].

Install the male coupler into the female coupler. Full connection is made when the ball release sleeve slides forward on the female coupler [Figure 64].

NOTE: Check that the attachment hydraulic hoses are not twisted or contacting any moving parts of the loader or attachment. (See For First Time Installation on Page 46.) for proper adjustment.

To Disconnect:

Relieve hydraulic pressure. (See the loader's Operation & Maintenance Manual and Operator's Handbook for correct procedure.)

Push the couplers together, retract the sleeve on the female coupler until the couplers disconnect.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Control Functions

! WARNING

Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W-2001-0502

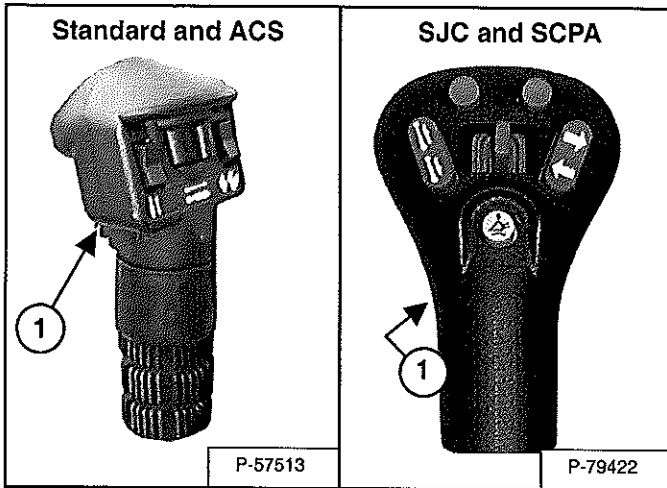
With the seat bar raised, press the auxiliary hydraulic button on the left panel once to engage the auxiliary hydraulics. (See the loader's Operation & Maintenance Manual and Operator's Handbook for correct procedure.)

NOTE: The auxiliary hydraulics must be activated prior to attachment operation.

When the operator is seated in the cab and raises the seat bar, the Auxiliary Hydraulics will deactivate.

The auxiliary hydraulics can be activated with the seat bar in the down or up position.

Figure 65



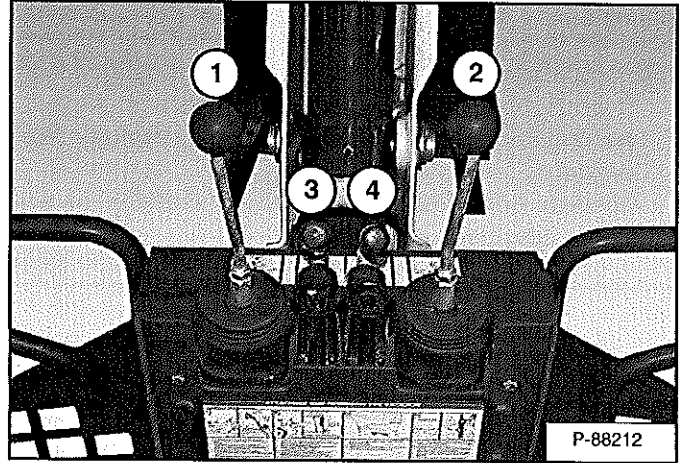
Push the button (Item 1) [Figure 65] on the right steering lever once for continuous flow (detent) to the auxiliary quick couplers.

Push the button (Item 1) [Figure 65] a second time to disengage continuous flow (detent).

Disengage the auxiliary hydraulics before leaving the loader / backhoe.

NOTE: Reference to left-hand and right-hand refers to the left and right side of the backhoe as viewed from the backhoe operator's seat.

Figure 66



1. Boom / Swing Control Lever.
2. Arm / Bucket Control Lever.
3. Left Stabilizer Control Lever.
4. Right Stabilizer Control Lever.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader

Read this Backhoe Operation & Maintenance Manual and Operator's Handbook for the Bobcat loader.

! WARNING

Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W-2001-0502

Before operating the loader and backhoe do the following:

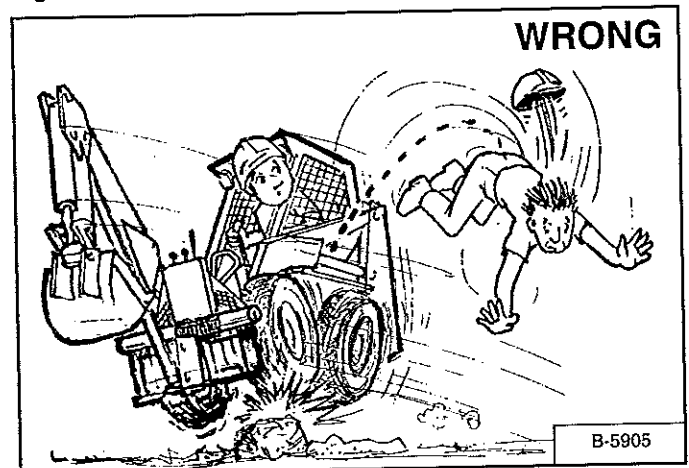
Check that the Bob-Tach levers are fully lowered and locked and that frame locking levers are locked. (See Installation on Page 35.)

Check that the Bob-Tach wedges extend through the holes in the backhoe mounting frame. (See Installation on Page 35.)

Check that the safety chain is latched in the bracket and the retaining pin is properly installed. (See Attaching The Backhoe on Page 39.)

Check condition of hydraulic hoses for damage. Replace hoses as needed.

Figure 67



Never allow rider on the loader / backhoe [Figure 67].

! WARNING

AVOID INJURY OR DEATH

Never allow riders on the loader/backhoe.

Keep personnel out of the maximum swing reach area during operation.

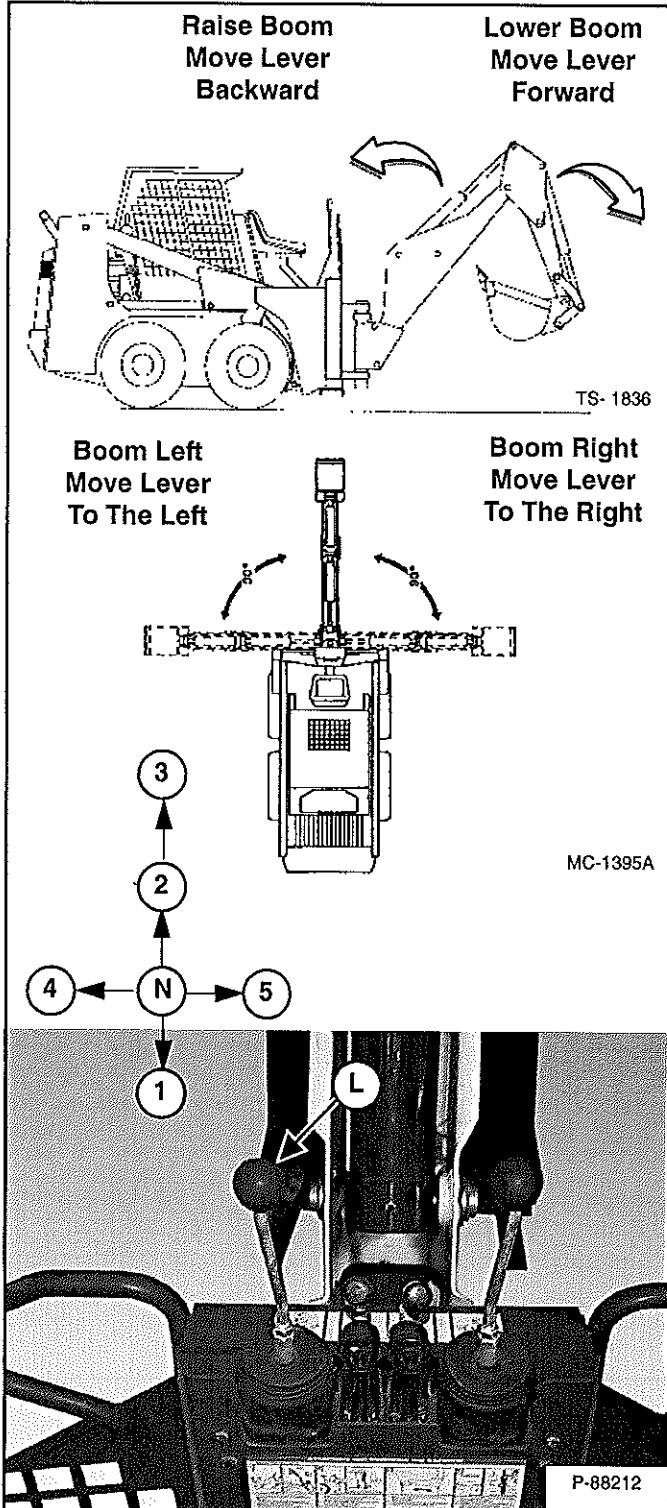
W-2176-0295

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Boom / Swing Operation

Figure 68



Learn the function of the control levers before you start the engine to begin operation [Figure 68].

! WARNING

AVOID INJURY OR DEATH

- Never permit personnel to stand in the maximum swing reach area while operating the backhoe.
- Never move a load above other personnel.

W-2681-1007

LEFT LEVER (Item L) [Figure 68] - Boom and Swing

NOTE: Reference to left-hand and right-hand refers to the left and right side of the backhoe as viewed from the backhoe operator's seat.

Boom lever positions:

N - Neutral

1 - Raise Boom - Pull lever backward.

2 - Lower Boom - Push lever forward.

3 - Float Position - Push lever farther forward. In float position there is no hydraulic force on the boom.

4 - Swing Left - Move lever to the left.

5 - Swing Right - Move lever to the right.

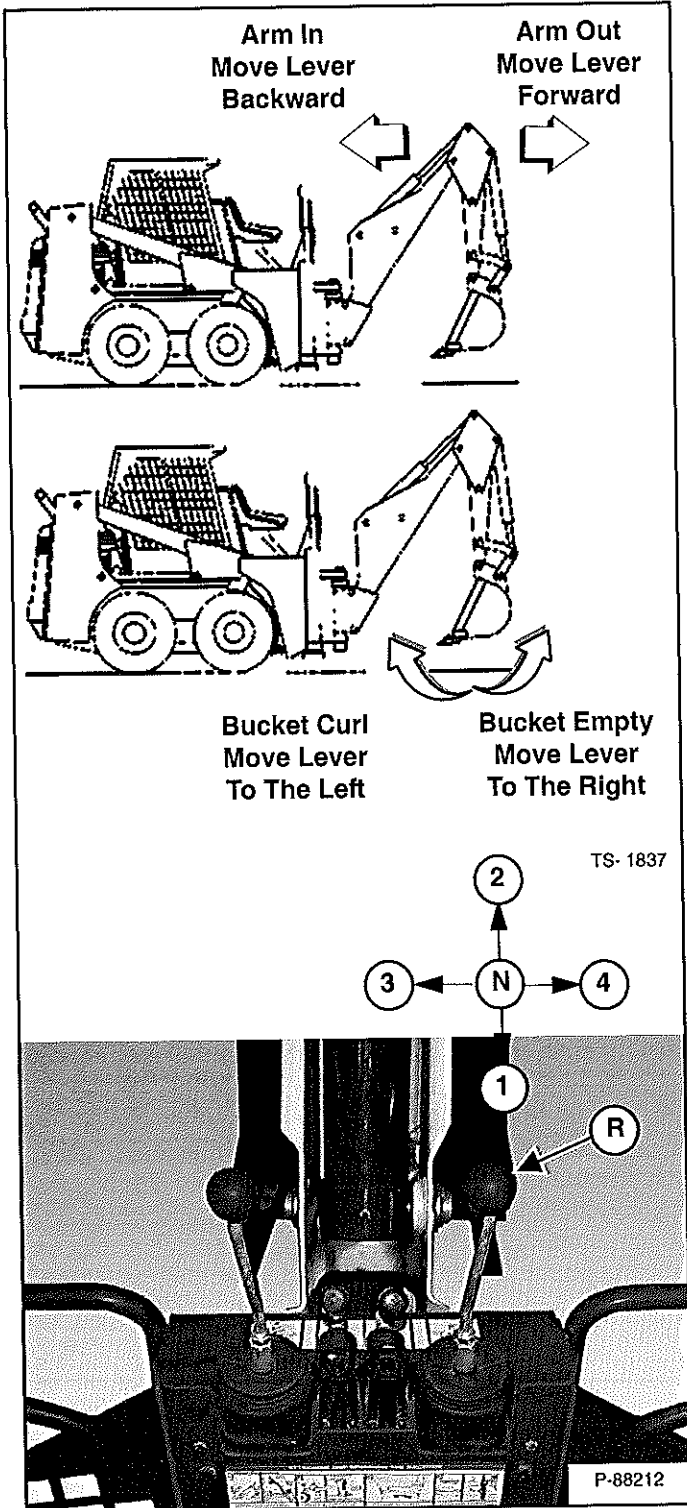
NOTE: When you release the lever, it will return to the neutral position (N).

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Arm / Bucket Operation

Figure 69



RIGHT LEVER (Item R) [Figure 69] - Arm and Bucket.

N - Neutral

1 - Arm In - Pull lever backward.

2 - Arm Out - Push lever forward.

3 - Curl Bucket (fill bucket) - Move lever to the left.

4 - Empty Bucket - Move lever to the right.

NOTE: When you release the lever, it will return to the neutral position (N).



AVOID INJURY OR DEATH

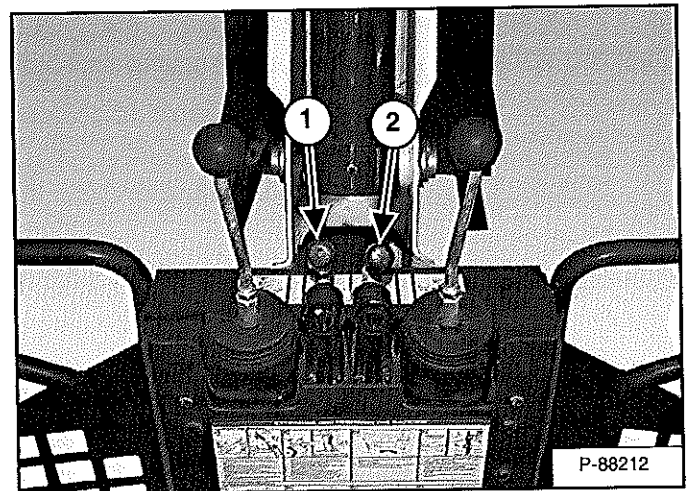
Never allow riders on the loader/backhoe.

Keep personnel out of the maximum swing reach area during operation.

W-2176-0295

Stabilizer Operation

Figure 70



Push Lever (Item 1) [Figure 70] forward to lower the left stabilizer. Pull the lever backward to raise the left stabilizer.

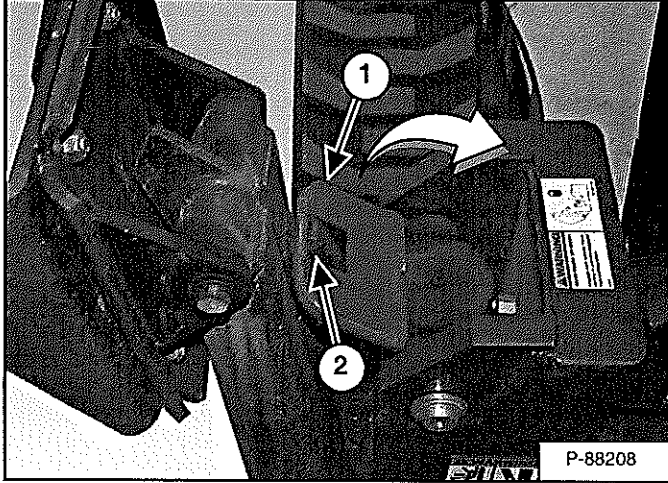
Push Lever (Item 2) [Figure 70] forward to lower the right stabilizer. Pull the lever backward to raise the right stabilizer.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Disengaging The Stabilizer Transport Lock

Figure 71



NOTE: Stabilizer transport lock (Item 1) [Figure 71] shown in the transport / locked position.

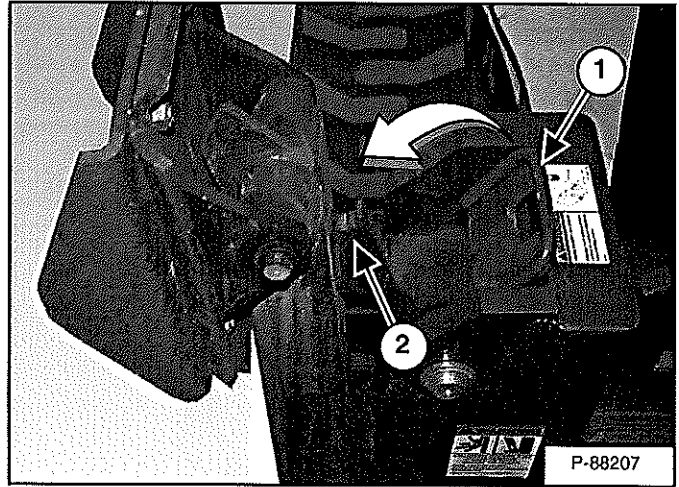
Fully raise the left and right stabilizers. (See Stabilizer Operation on Page 51.)

Rotate the stabilizer transport lock (Item 1) from the hook (Item 2) [Figure 71] on the stabilizer(s).

Lower the stabilizers. (See Stabilizer Operation on Page 51.)

Engaging The Stabilizer Transport Lock

Figure 72



NOTE: Stabilizer transport lock (Item 1) [Figure 72] shown in the operation position.

Fully raise the left and right stabilizers. (See Stabilizer Operation on Page 51.)

Rotate the stabilizer transport lock(s) (Item 1) onto the hook (Item 2) [Figure 72] on the stabilizer(s).

Lower the stabilizers until the hook is securely against the stabilizer transport lock. (See Stabilizer Operation on Page 51.)

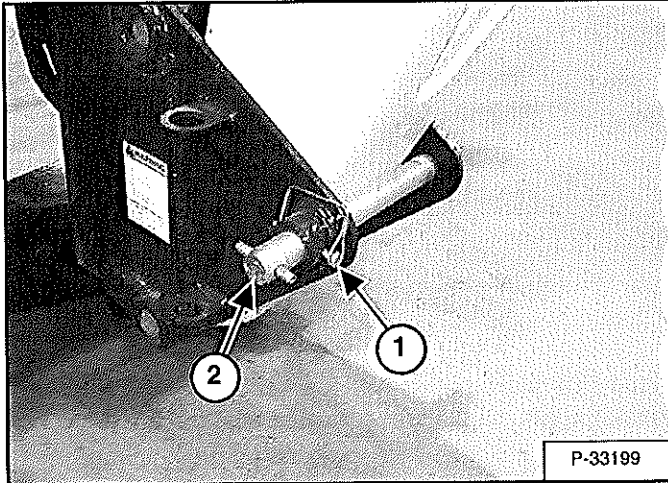
NOTE: Keep the locks clean and free of debris so that they move easily.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Removing The Boom Transport Lock Pin

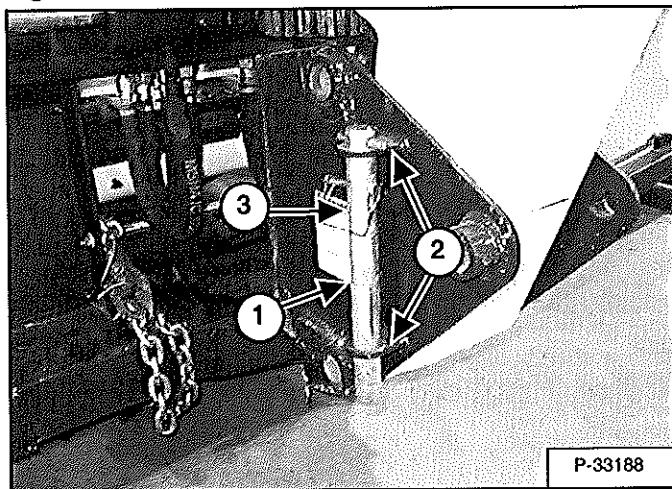
Figure 73



Fully raise the backhoe boom. (See Boom / Swing Operation on Page 50.)

Remove the retaining pin (Item 1) and boom transport lock pin (Item 2) [Figure 73].

Figure 74



Place the boom lock pin (Item 1) in the swing frame storage mounts (Item 2) and install the retaining pin (Item 3) [Figure 74].

Installing The Boom Transport Lock Pin

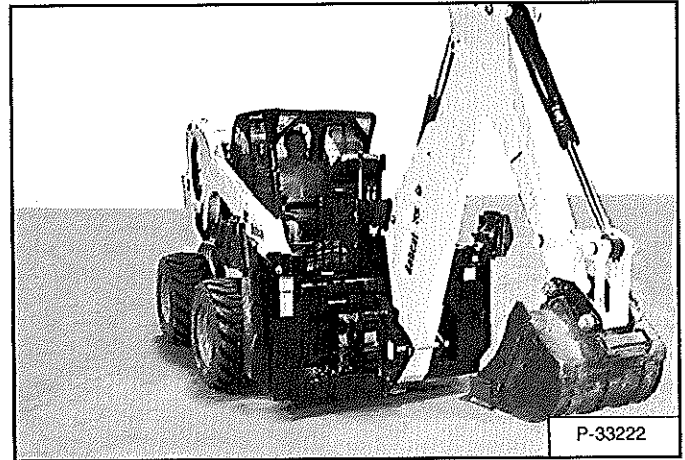
Fully raise the backhoe boom. (See Boom / Swing Operation on Page 50.)

Remove the retaining pin (Item 3) and boom transport lock pin (Item 1) from the storage mounts (Item 2) [Figure 74].

Install the boom transport lock pin (Item 1) and the retaining pin (Item 2) [Figure 73].

Moving The Loader / Backhoe

Figure 75



Raise the backhoe boom fully and curl the bucket to the crowd position. (See Arm / Bucket Operation on Page 51.) [Figure 75].

Move the boom to the center of the loader. (See Boom / Swing Operation on Page 50.)

Fully retract the stabilizers. (See Stabilizer Operation on Page 51.)

Engage the stabilizer locks. (See Engaging The Stabilizer Transport Lock on Page 52.)

Exit the loader / backhoe. (See Entering And Exiting The Loader on Page 34.)

Install the boom transport lock pin. (See Installing The Boom Transport Lock Pin on Page 53.)

Enter the loader / backhoe. (See Entering And Exiting The Loader on Page 34.)

Start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Raise the rear stabilizers (if equipped).

Move the loader / backhoe to the desired work location.

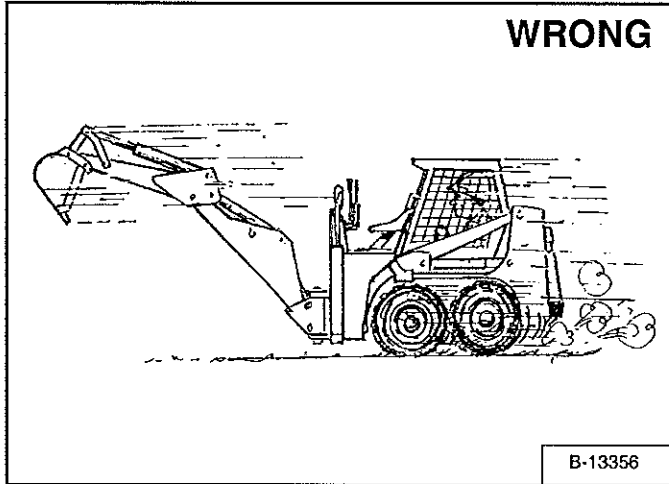
NOTE: Always move the backhoe with the stabilizers and boom raised, the arm retracted, and bucket curled and locked in the transport position.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

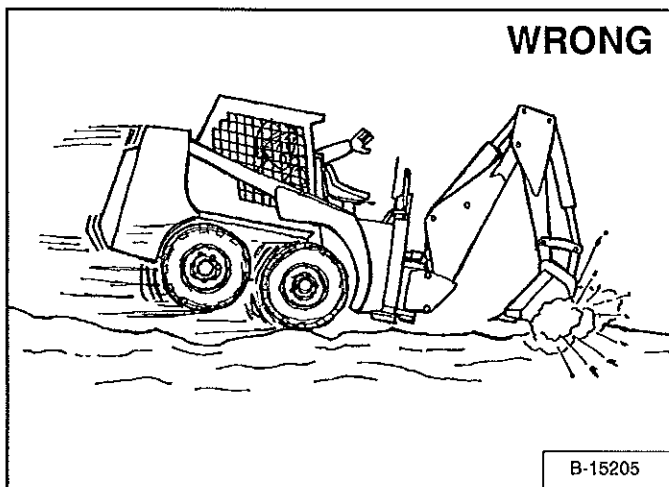
Moving The Loader / Backhoe (Cont'd)

Figure 76



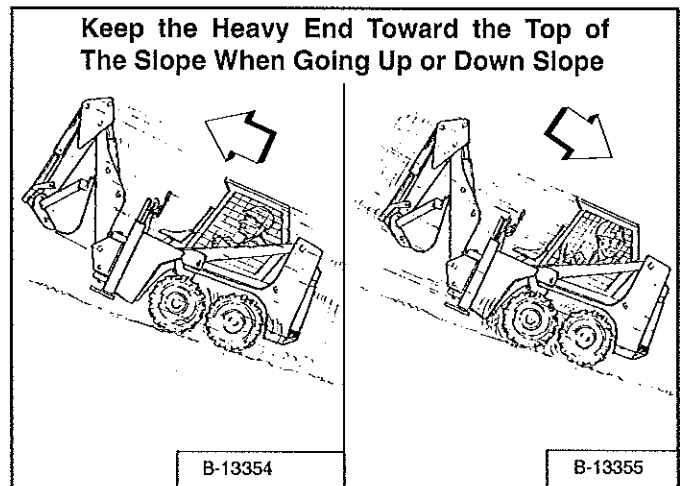
NOTE: Always travel at a safe controlled speed [Figure 76].

Figure 77



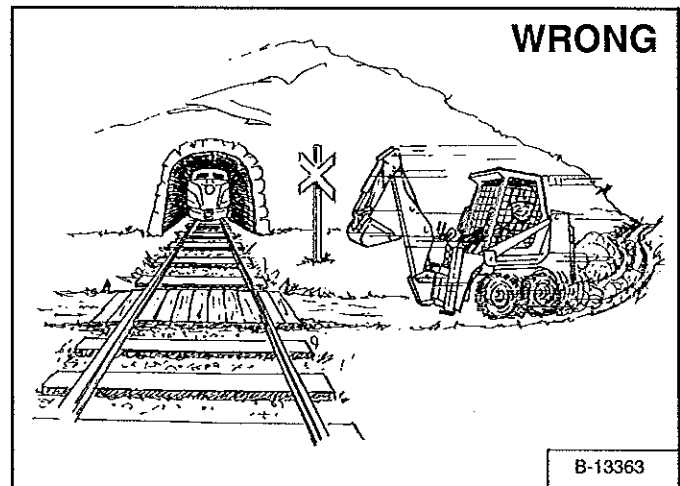
Drive the loader so that the backhoe does not tip forward and hit the ground when moving the loader / backhoe from one location to another. This can cause damage to the backhoe structure, hydraulic cylinders and pivot pins [Figure 77].

Figure 78



Go up and down slopes with the heavy end of the loader / backhoe toward the top of the slope [Figure 78].

Figure 79



Before going into underpasses or tunnels, check for obstacles [Figure 79].

Check for hidden holes, drop-offs or obstacles that could be dangerous.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Operating The Backhoe

! WARNING

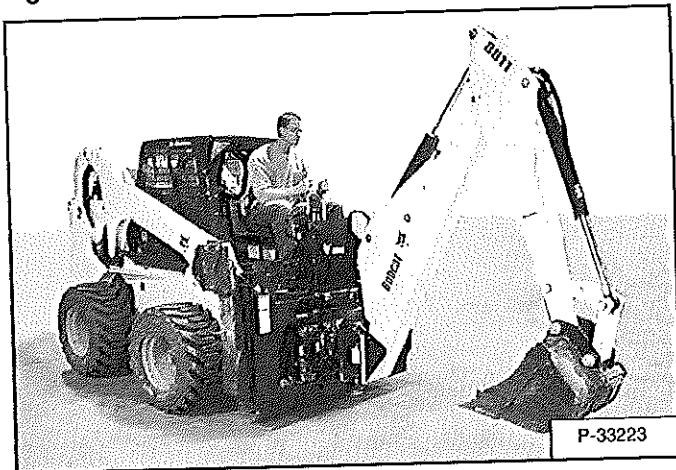
AVOID INJURY

Before you start operating the loader/backhoe make sure the loader steering levers are in neutral and the parking brake is engaged. Check the fasteners holding the backhoe to the loader.

W-2183-1298

Enter the loader / backhoe. (See Entering And Exiting The Loader on Page 34.) Start the loader. Set the parking brake. Adjust the throttle as necessary.

Figure 80



Activate the auxiliary hydraulics prior to moving to the backhoe seat. (See Control Functions on Page 48.)

Move to the backhoe operators seat [Figure 80].

Fully raise the backhoe boom. (See Boom / Swing Operation on Page 50.)

Disengage the auxiliary hydraulic controls (See Control Functions on Page 48.)

Stop the engine.

Exit the loader / backhoe. (See Entering And Exiting The Loader on Page 34.) Never leave the loader / backhoe with the engine running. Stop the engine before leaving the loader / backhoe.

Remove the boom transport lock pin. (See Removing The Boom Transport Lock Pin on Page 53.)

Enter the loader / backhoe. (See Entering And Exiting The Loader on Page 34.) Start the loader. Set the parking brake. Adjust the throttle as necessary.

Activate auxiliary hydraulic controls (See Control Functions on Page 48.)

Lower the rear stabilizers (if equipped).

Move to the backhoe operators seat [Figure 80].

Fully raise the left and right stabilizers. (See Stabilizer Operation on Page 51.)

Disengage the stabilizer transport locks. (See Disengaging The Stabilizer Transport Lock on Page 52.)

Lower the left and right stabilizers to the ground. Lower the stabilizers far enough to remove weight from the loader tires without lifting them off the ground. (See Stabilizer Operation on Page 51.)

NOTE: Operate the backhoe at a slow rate in an open and level area when learning to operate the backhoe.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Operating The Backhoe (Cont'd)

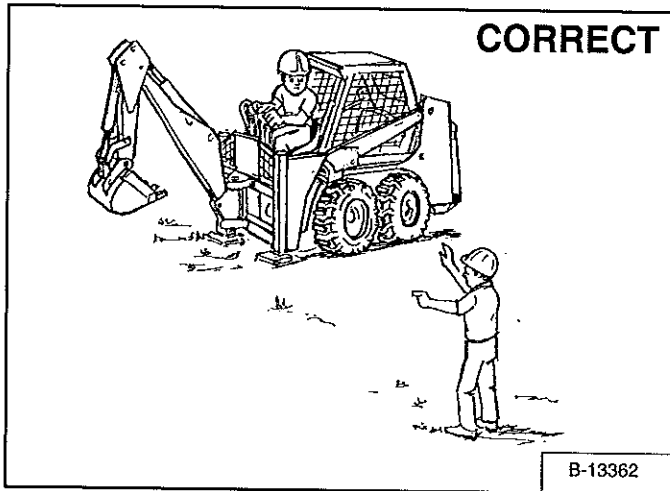
! WARNING

AVOID INJURY OR DEATH

- Never permit personnel to stand in the maximum swing reach area while operating the backhoe.
- Never move a load above other personnel.

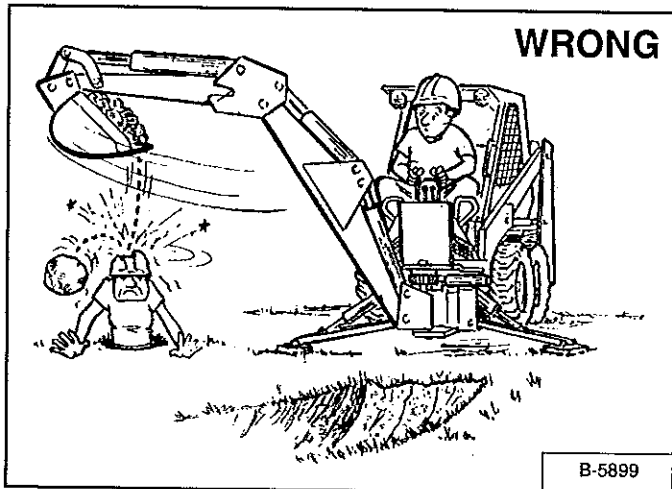
W-2681-1007

Figure 81



Never permit personnel to stand in the maximum swing reach area while operating the backhoe [Figure 81].

Figure 82



Never move a load above other personnel [Figure 82].

! WARNING

AVOID INJURY OR DEATH

Before you leave the backhoe:

- Fully lower the backhoe boom or install the boom transport lock pin.
- Stop the engine.
- Engage the parking brake.
- Move all pedals, handles, joysticks and other controls until they are LOCKED or in the NEUTRAL position.

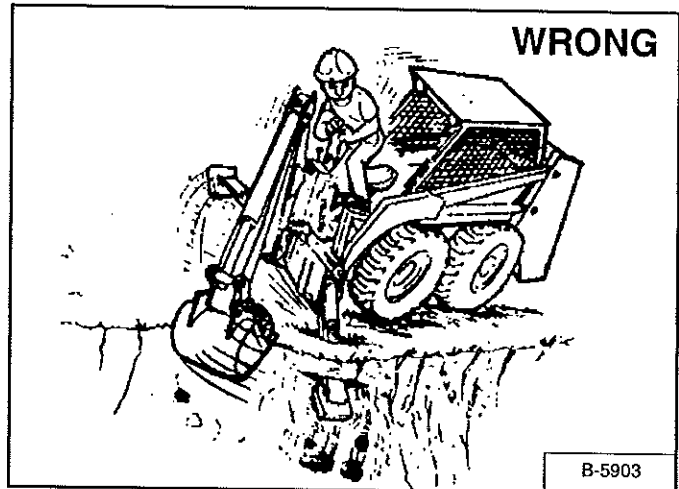
SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2770-1208

Never leave the loader / backhoe with the engine running. Stop the engine before leaving the loader / backhoe.

Lower the backhoe to the ground and stop the engine before making any adjustments on the backhoe or loader.

Figure 83



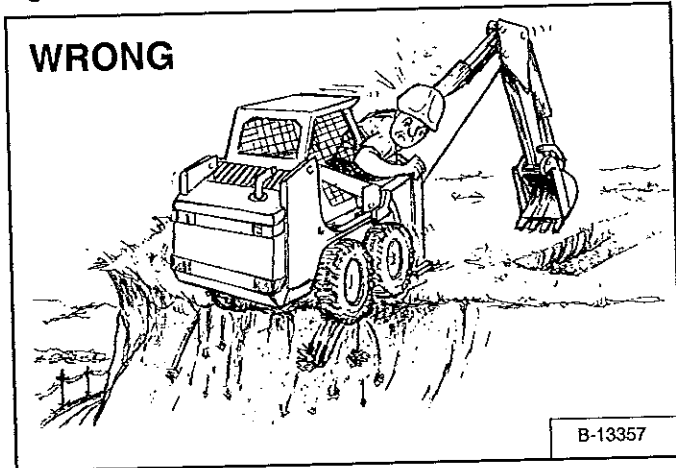
The loader / backhoe must remain level and stable during operation. Never dig under a stabilizer [Figure 83].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Operating The Backhoe (Cont'd)

Figure 84



Never operate near an overhang [Figure 84].

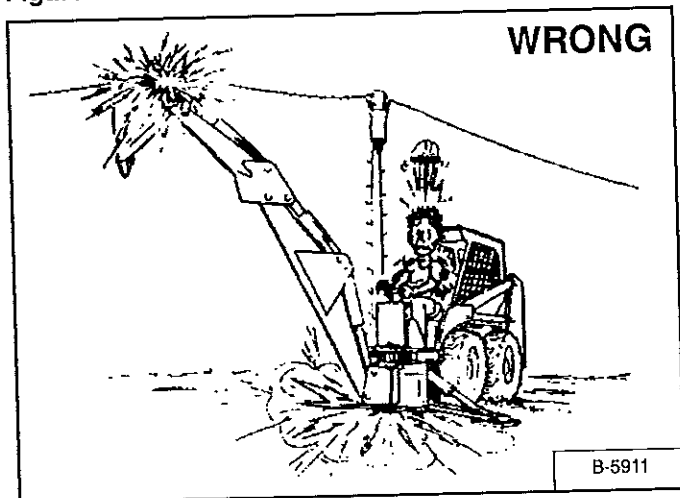
! WARNING

AVOID INJURY OR DEATH

Check area to be excavated for overhead or underground lines such as electrical, gas, oil, water, etc. DIAL 811 (USA Only) or 1-888-258-0808 (USA & Canada) and consult local utilities before digging. Extreme caution must be used in areas where utility lines are present.

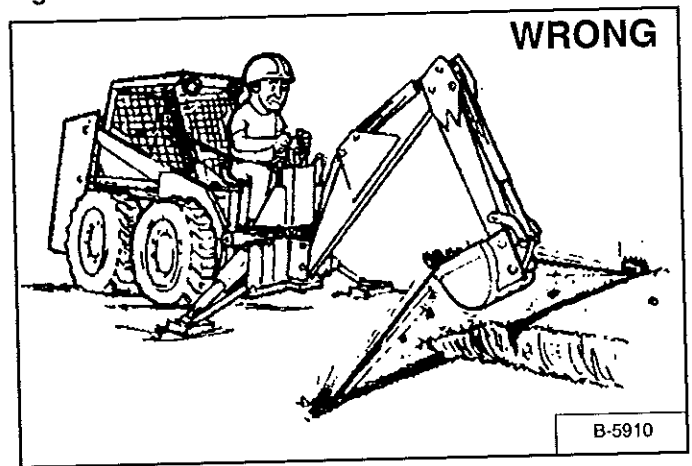
W-2686-1007

Figure 85



Check for clearance of the loader / backhoe under overhead lines [Figure 85].

Figure 86



Know the work area. Check for location of underground electrical cables, gas lines or water pipes [Figure 86].

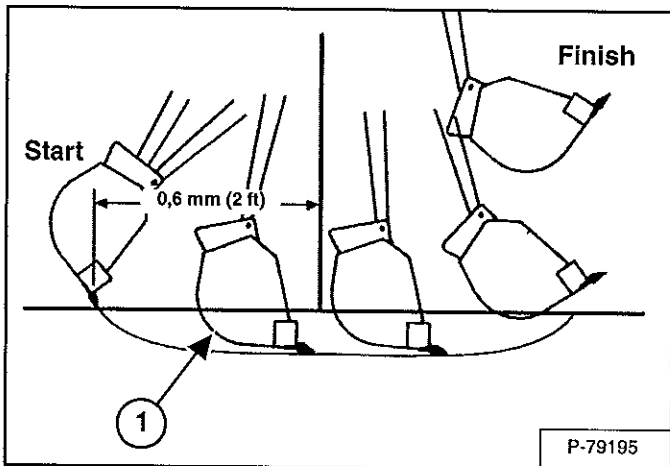
OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Operating The Backhoe (Cont'd)

Use the following method when digging the ground for a new trench:

Figure 87



1. Position the bucket at the approximate angle shown [Figure 87].
2. Set the arm so that the bucket teeth engage the ground approximately 0,6 mm (2 ft) beyond the vertical position of the arm.
3. Leave the boom and bucket in the position given (Steps 1 and 2) and move the arm to fill the bucket.

NOTE: The bucket must be set so that the heel (Item 1) [Figure 87] of the bucket does not hit the bottom of the trench.

4. Continue to dig in the same manner by digging 76 - 152 mm (3 - 6 in) deeper each time. If the arm will not move, roll the bucket or raise the boom slightly and continue to dig.

! WARNING

AVOID INJURY OR DEATH

Never use the backhoe for lifting, conveying or providing a work platform for personnel.

W-2695-1007

Use the following method when you need a vertical wall at the ends of the trench:

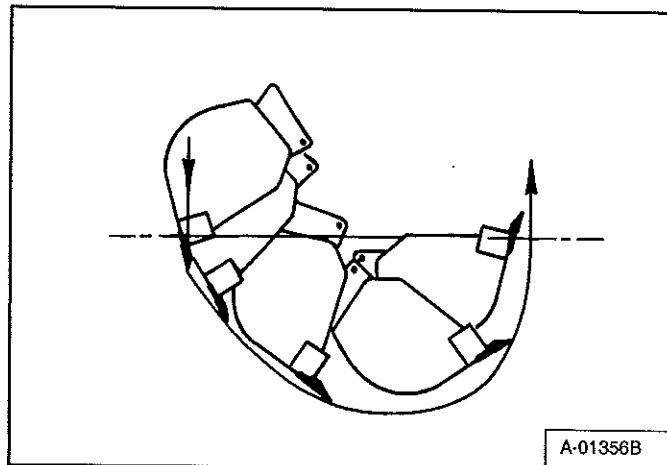
! WARNING

AVOID INJURY OR DEATH

Digging with the arm may pull the loader forward. Do not dig too much material at one time.

W-2182-0395

Figure 88



1. Set the bucket so that the bucket teeth are nearly vertical [Figure 88].
2. Use the boom to force the bucket into the ground.
3. Use the boom to force the bucket farther into the ground and at the same time curl the bucket until it is full.
4. Raise and swing the boom, then extend the bucket dumping the material.
5. Continue to dig in the same manner by digging deeper each time.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

! WARNING

AVOID INJURY OR DEATH

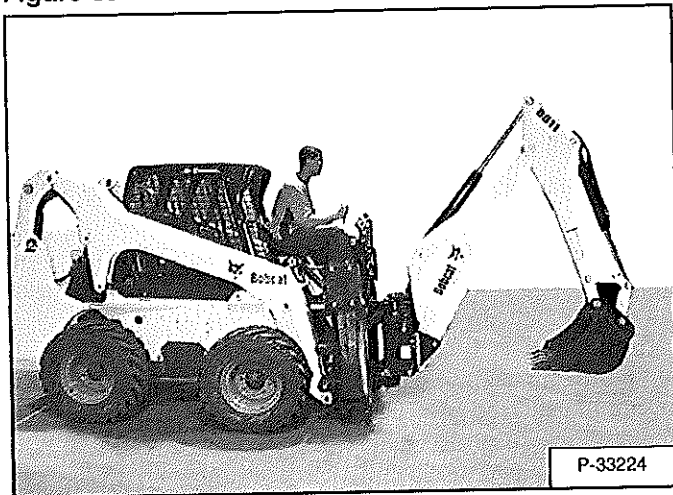
Operate from the backhoe seat only when digging or moving the loader 1,5 m (5 ft) or less, on level ground away from the excavation.

Move to the loader seat, fasten seat belt and lower seat bar when driving in all other conditions.

W-2910-0311

Moving The Loader / Backhoe While Digging (Earlier Loader Models)

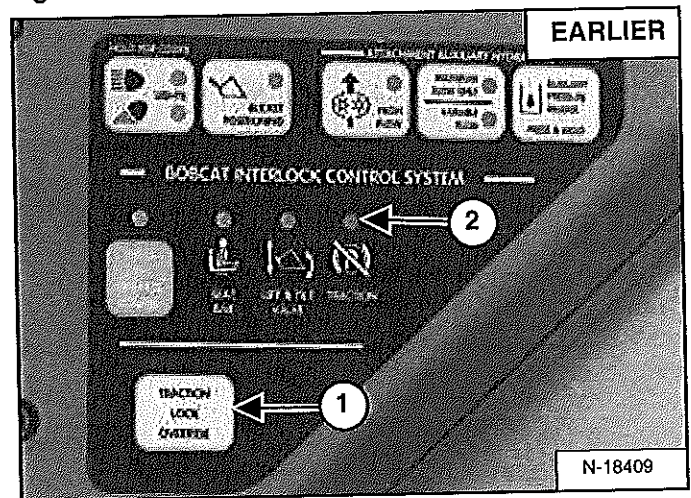
Figure 89



When the trench is the desired depth, move the loader / backhoe in the following manner:

1. Raise the boom so that the bucket is above the ground and in the crowd position [Figure 89]. Center the boom. (See Boom / Swing Operation on Page 50.)

Figure 90



2. Press the traction lock override button (Item 1) once to unlock the traction drive (the traction light (Item 2) [Figure 90] will be ON).

Press the button a second time to lock the traction drive (the traction light (Item 1) [Figure 90] will be OFF).

NOTE: The Traction Lock Override button will unlock the traction drive when the operator is NOT in the seat and the seat bar is raised.

The Traction Lock Override button will function if the parking brake is in the engaged or disengaged position.

3. Raise the left and right backhoe stabilizers so they are off the ground [Figure 89]. (See Stabilizer Operation on Page 51.)
4. Raise the rear stabilizers (if equipped).
5. Drive the loader backward as straight as possible along the trench line. DO NOT move backward too far; this will change the trench depth. Moving the boom too far out decreases deep digging ability.
6. Lower the left and right backhoe stabilizers to the ground. Lower the stabilizers far enough to remove weight from the loader tires without lifting them off the ground.
7. Lower the rear stabilizers (if equipped)
8. Push the traction lock override button (light OFF).
9. Repeat the steps when moving the loader / backhoe while digging.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

WARNING

AVOID INJURY OR DEATH

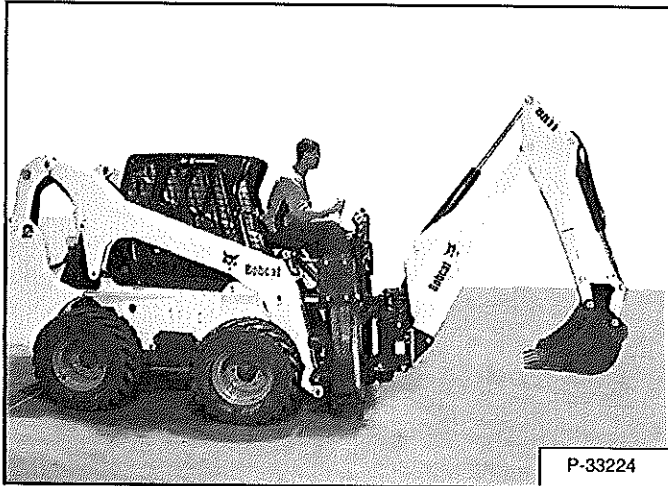
Operate from the backhoe seat only when digging or moving the loader 1,5 m (5 ft) or less, on level ground away from the excavation.

Move to the loader seat, fasten seat belt and lower seat bar when driving in all other conditions.

W-2910-0311

Moving The Loader / Backhoe While Digging (Later Loader Models)

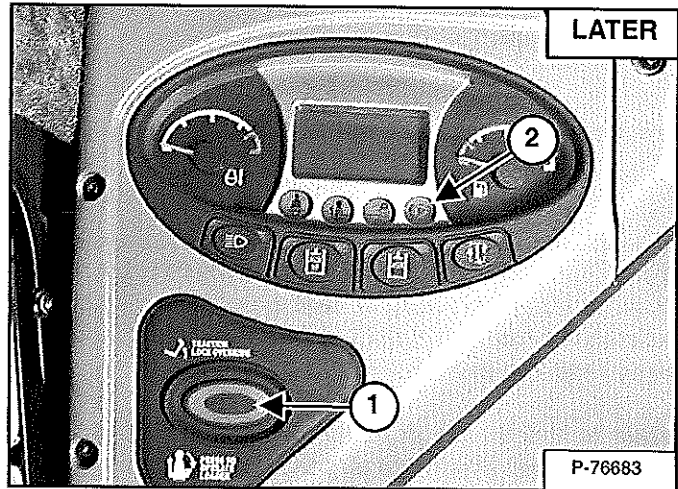
Figure 91



When the trench is the desired depth, move the loader / backhoe in the following manner:

1. Raise the boom so that the bucket is above the ground and in the crowd position [Figure 91]. Center the boom. (See Boom / Swing Operation on Page 50.)

Figure 92



2. Press the TRACTION LOCK OVERRIDE button (Item 1) once to unlock the traction drive. The PARKING BRAKE light (Item 2) [Figure 92] will be OFF.

Press the button a second time to lock the traction drive. The PARKING BRAKE light (Item 2) [Figure 92] will be ON.

NOTE: The Traction Lock Override button will unlock the traction drive when the operator is NOT in the seat and the seat bar is raised.

The Traction Lock Override button will function if the parking brake is in the engaged or disengaged position.

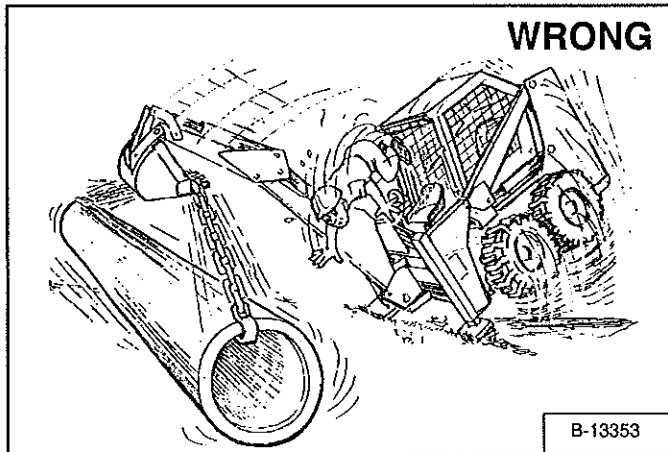
3. Raise the left and right backhoe stabilizers so they are off the ground [Figure 91]. (See Stabilizer Operation on Page 51.)
4. Raise the rear stabilizers (if equipped).
5. Drive the loader backward as straight as possible along the trench line. DO NOT move backward too far; this will change the trench depth. Moving the boom too far out decreases deep digging ability.
6. Lower the left and right backhoe stabilizers to the ground. Lower the stabilizers far enough to remove weight from the loader tires without lifting them off the ground.
7. Lower the rear stabilizers (if equipped)
8. Push the traction lock override button (Item 1) (parking brake light (Item 2) will be ON).
9. Repeat the steps when moving the loader / backhoe while digging.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Operation With The Loader (Cont'd)

Lifting And Moving Objects

Figure 93



When using the backhoe to lift and place objects, be sure the load is less than the lift capacity (See Capacities on Page 97.) of the loader / backhoe [Figure 93].

Objects must be handled so that the load is balanced. To maintain stability the load must be kept close to the backhoe with the boom in line with the center of the loader. When the boom is moved to the side with a load, it must be moved slowly and smoothly so the load does not sway or swing out of control. Never lift a load over personnel. Lower the object as soon as possible and never leave it hanging.

WARNING

AVOID INJURY OR DEATH

Keep objects balanced and as close to the backhoe and ground as possible when lifting with the backhoe. Swing lifted objects slowly. Always lower objects to the ground before leaving the machine.

W-2115-0189

OPERATING PROCEDURE WITH LOADERS (CONT'D)

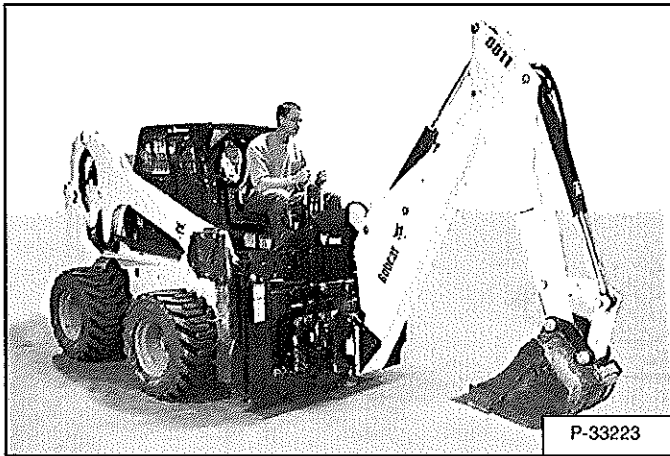
Removal

Enter the loader / backhoe. (See Entering And Exiting The Loader on Page 34.) Start the loader. Set the parking brake. Adjust the throttle as necessary.

Tilt the Bob-Tach backward to remove pressure on the mounting hooks.

Activate auxiliary hydraulic controls (See Control Functions on Page 48.)

Figure 94



Move to the backhoe operators seat [Figure 94].

Raise the rear loader stabilizers (if equipped).

Fully raise the left and right backhoe stabilizers. (See Stabilizer Operation on Page 51.)

Engage the backhoe stabilizer transport locks. (See Engaging The Stabilizer Transport Lock on Page 52.)

Fully raise the backhoe boom and position it to the center of the loader. (See Boom / Swing Operation on Page 50.)

Position the arm vertically and the bucket cutting edge parallel to the ground [Figure 94].

Disengage the auxiliary hydraulic controls (See Control Functions on Page 48.)

Stop the engine.

WARNING

AVOID INJURY OR DEATH

Before you leave the backhoe:

- Fully lower the backhoe boom or install the boom transport lock pin.
- Stop the engine.
- Engage the parking brake.
- Move all pedals, handles, joysticks and other controls until they are LOCKED or in the NEUTRAL position.

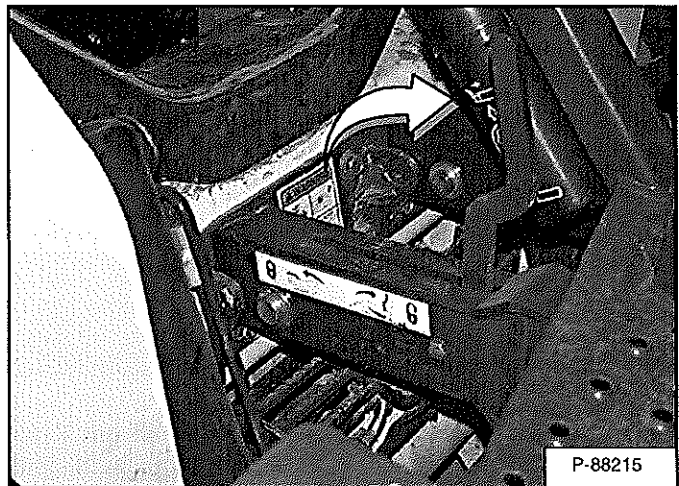
SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2770-1208

Exit the loader / backhoe. (See Entering And Exiting The Loader on Page 34.) Never leave the loader / backhoe with the engine running. Stop the engine before leaving the loader / backhoe.

Install the boom transport lock pin. (See Installing The Boom Transport Lock Pin on Page 53.)

Figure 95



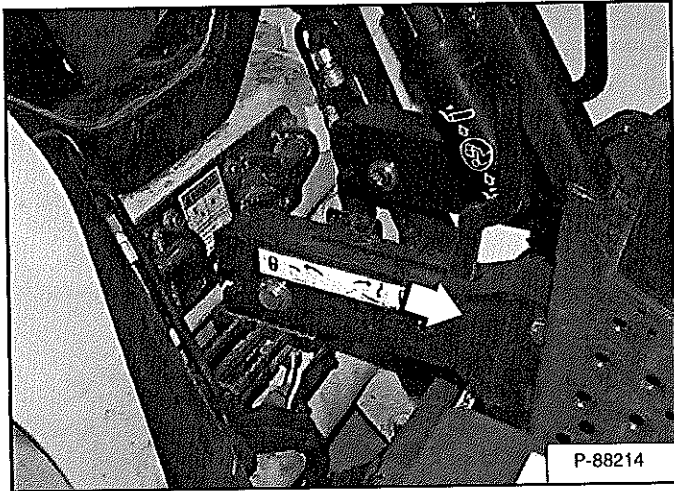
Disengage both backhoe frame lock levers to unlock the backhoe from the loader [Figure 95].

Enter the loader. (See Entering And Exiting The Loader on Page 34.)

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Removal (Cont'd)

Figure 96



Tilt the backhoe forward until the latches are clear of the mounts and the backhoe bucket is on the ground [Figure 96].

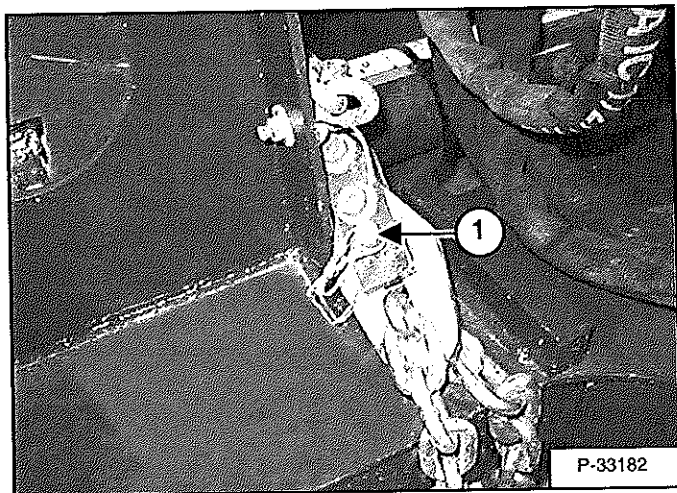
Relieve hydraulic pressure. (See the loader's Operation & Maintenance Manual for the correct procedure.)

Stop the engine.

Exit the loader / backhoe. (See Entering And Exiting The Loader on Page 34.) Never leave the loader / backhoe with the engine running. Stop the engine before leaving the loader / backhoe.

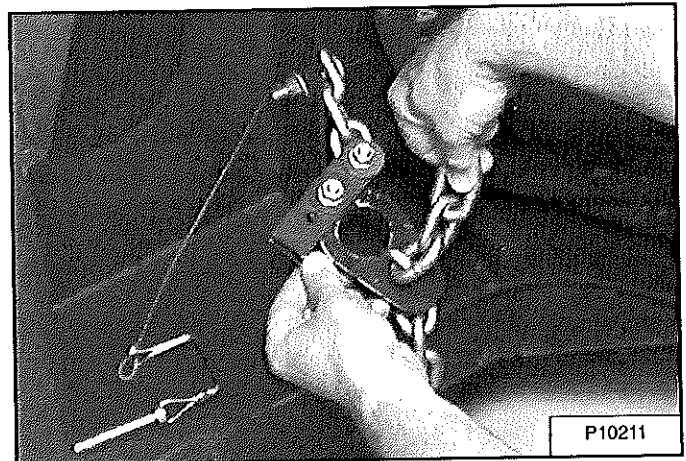
Disconnect the auxiliary hydraulic hoses.

Figure 97



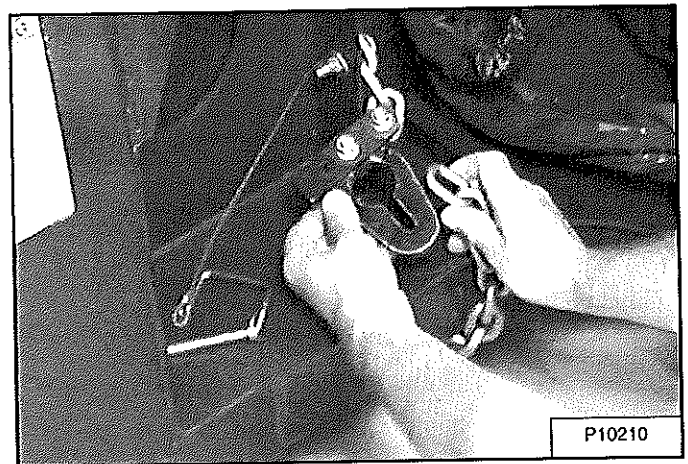
Remove the retaining pin (Item 1) [Figure 97] from the clip and latch.

Figure 98



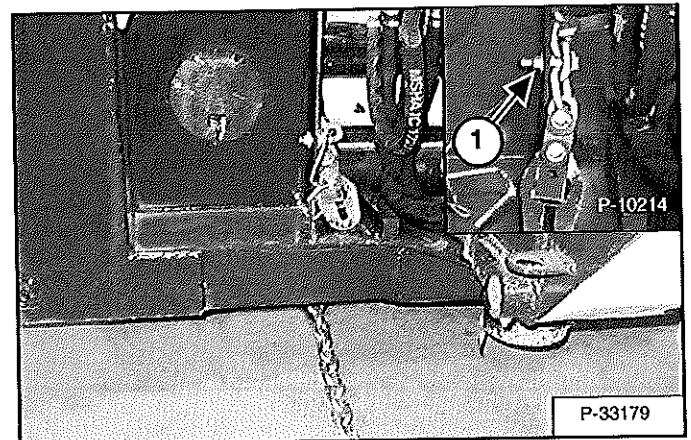
Slide the chain link out of the bracket slot [Figure 98].

Figure 99



Hold the latch open and remove the chain from the opening in the bracket [Figure 99].

Figure 100



Remove the safety chain from around the loader Bob-Tach and backhoe mounting frame [Figure 100].

NOTE: Check the condition of the bolt (Item 1) [Figure 100]. Replace bolt if damaged or missing.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Removal (Cont'd)

NOTE: When removing the 8811 Backhoe from a loader equipped with a Backhoe Bob-Tach adapter kit see instructions in back. (See **INSTALLATION INSTRUCTIONS** on Page II-1.)

Hand Lever Bob-Tach

Lower the lift arms while tilting the Bob-Tach forward and put the backhoe flat on the ground.

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.

Stop the engine.

Exit the loader. (See **Entering And Exiting The Loader** on Page 34.)

! WARNING

AVOID INJURY OR DEATH

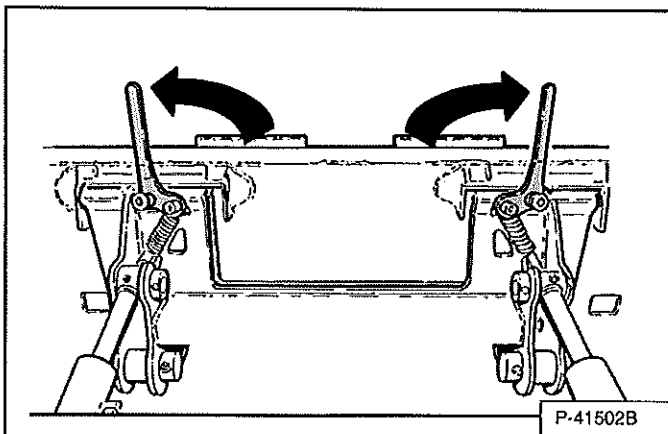
Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are **LOCKED** or in the **NEUTRAL** position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2722-0208

Figure 101



Pull the Bob-Tach levers up [Figure 101] until they are fully raised (wedges fully raised).

! WARNING

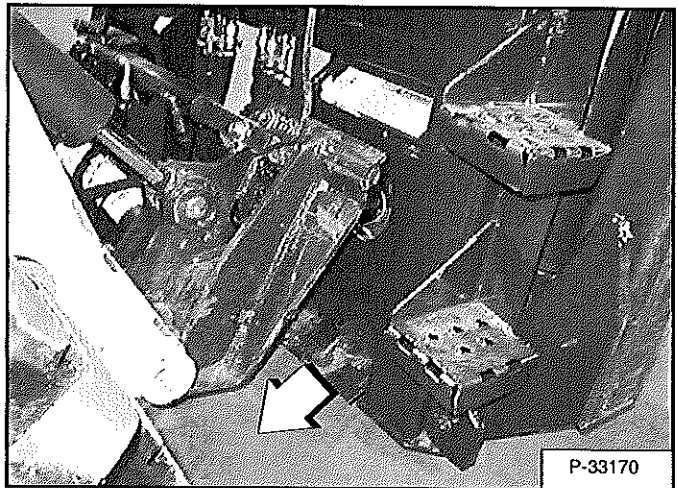
Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

W-2054-1285

Enter the loader. (See **Entering And Exiting The Loader** on Page 34.)

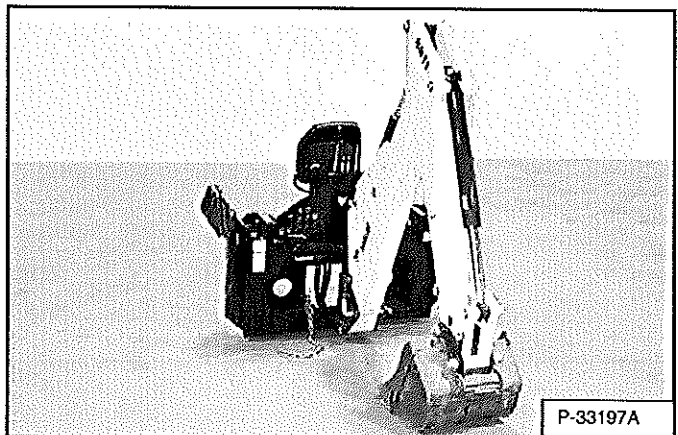
Start the engine, press the **PRESS TO OPERATE LOADER** button and release the parking brake.

Figure 102



Tilt the Bob-Tach forward and drive the loader backward, away from the attachment [Figure 102].

Figure 103



Always position the backhoe on a level surface, with the boom transport lock pin installed when removing the backhoe [Figure 103].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Removal (Cont'd)

NOTE: When removing the 8811 Backhoe from a loader equipped with a Backhoe Bob-Tach adapter kit see instructions in back. (See **INSTALLATION INSTRUCTIONS** on Page II-1.)

Power Bob-Tach

Lower the lift arms while tilting the Bob-Tach forward and put the backhoe flat on the ground.

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.

Figure 104

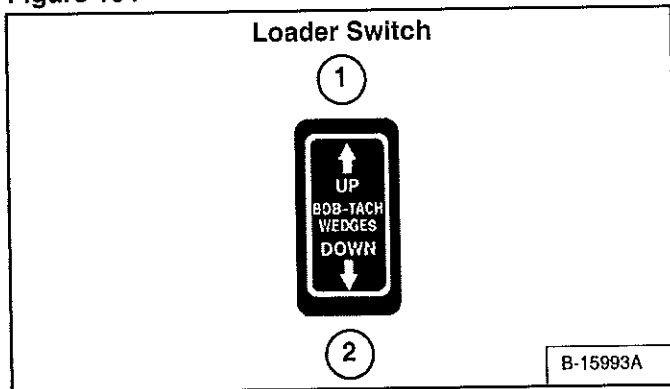
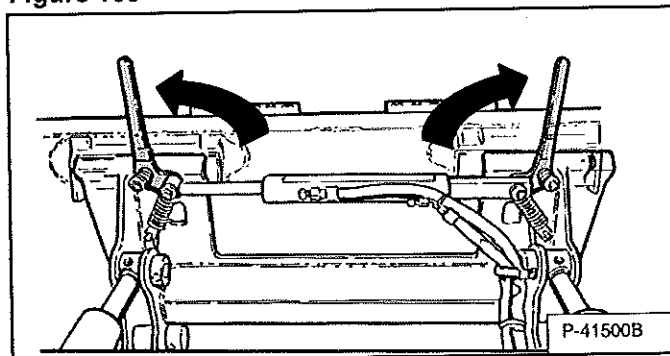
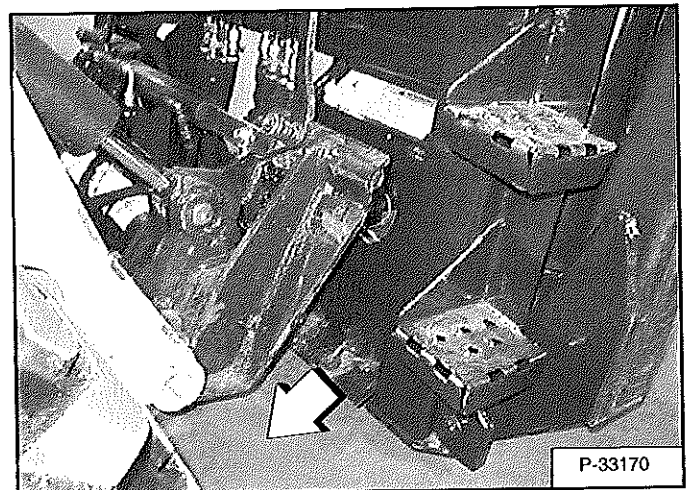


Figure 105



Push and hold the BOB-TACH "WEDGES UP" switch (Item 1) [Figure 104] until the levers [Figure 105] are fully raised (wedges fully raised).

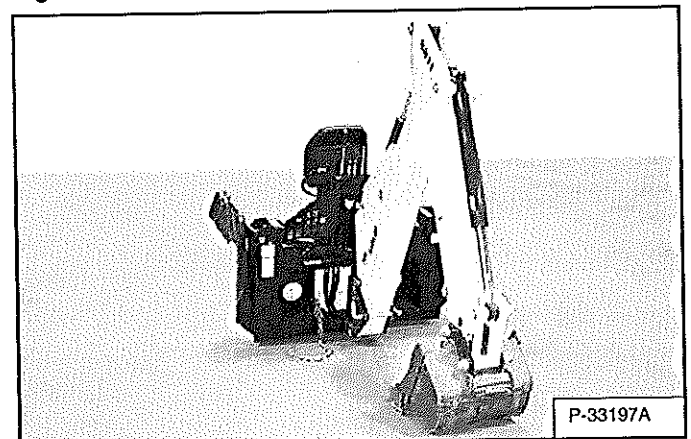
Figure 106



Tilt the Bob-Tach forward and drive the loader backward, away from the attachment [Figure 106].

NOTE: The Power Bob-Tach system has continuous pressurized hydraulic oil to keep the wedges in the engaged position and prevent attachment disengagement. Because the wedges can slowly lower, the operator may need to reactivate the switch (BOB-TACH "WEDGES UP") when removing an attachment to be sure both wedges are fully raised.

Figure 107



Always position the backhoe on a level surface, with the boom transport lock pin installed when removing the backhoe [Figure 107].

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Removal (Cont'd)

Remove The Bucket (Bolt On X-Change)

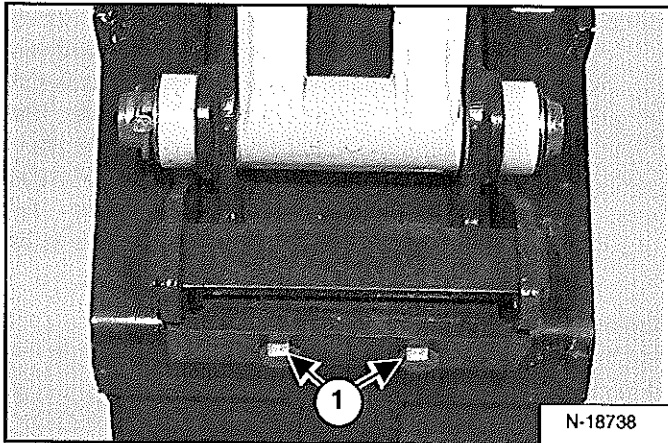
! WARNING

AVOID INJURY OR DEATH

Never use attachments or buckets which are not approved by Bobcat Company. Buckets and attachments for safe loads of specified densities are approved for each model. Unapproved attachments can cause injury or death.

W-2052-0907

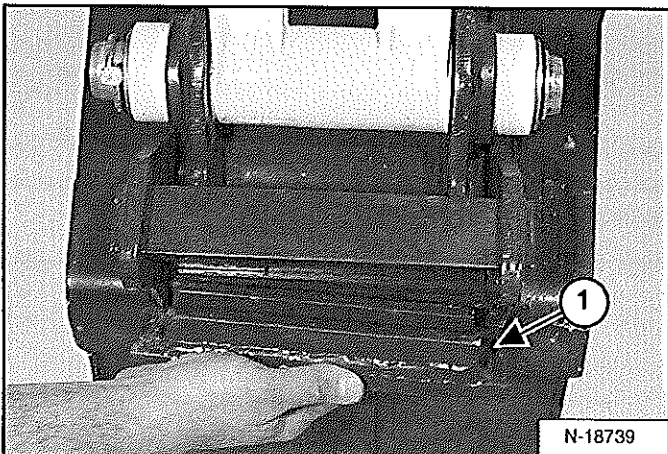
Figure 108



Select a flat level surface. Put the bucket on the ground. Stop the loader engine and engage the parking brake.

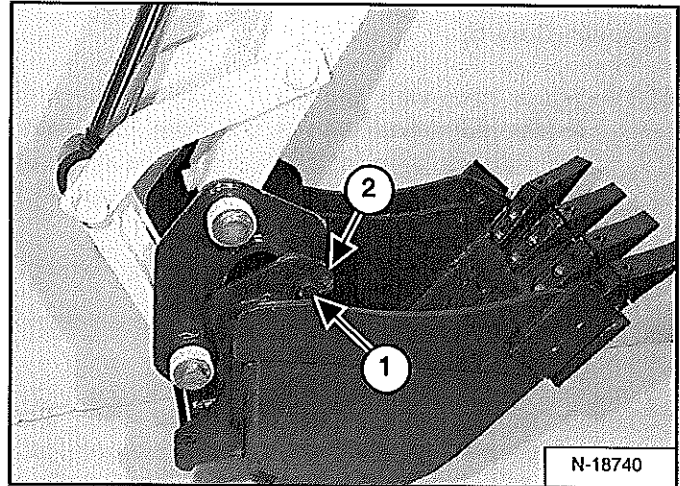
Remove the two bolts (Item 1) [Figure 108].

Figure 109



Remove the plate (Item 1) [Figure 109].

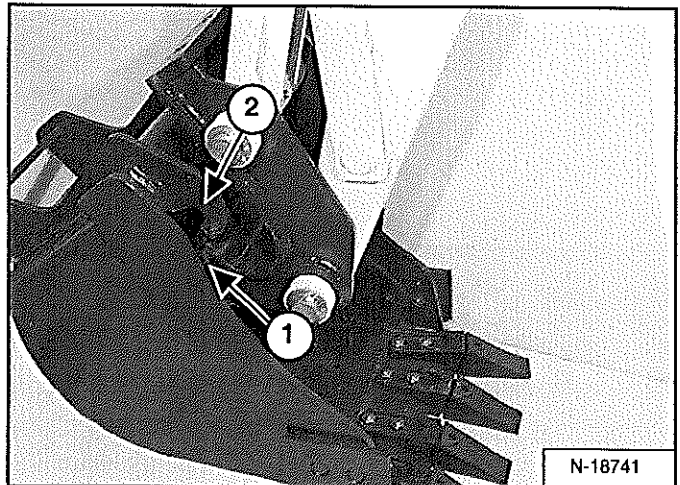
Figure 110



Start the loader, lift the boom approximately one foot.

Extend the bucket cylinder until the X-Change pins (Item 1) engage the hooks (Item 2) [Figure 110] on the bucket.

Figure 111



Retract the bucket cylinder and lower the boom and arm until the bucket is on the ground and the X-Change pins (Item 1) are disengaged from the hooks (Item 2) [Figure 111].

Move the arm towards the backhoe until the X-Change pins are clear of the bucket.

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Removal (Cont'd)

Remove The Bucket (Pin On X-Change)

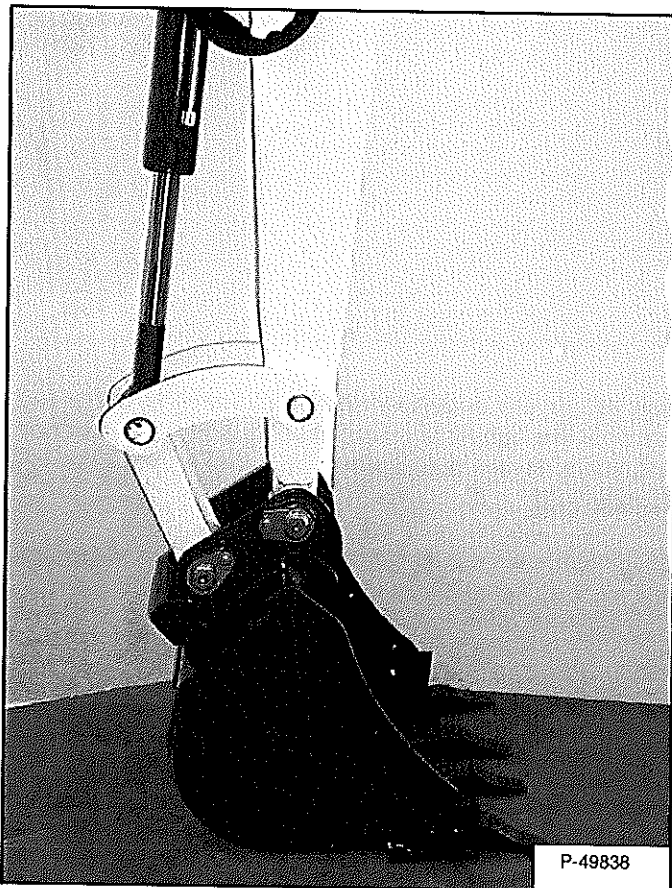
! WARNING

AVOID INJURY OR DEATH

Never use attachments or buckets which are not approved by Bobcat Company. Buckets and attachments for safe loads of specified densities are approved for each model. Unapproved attachments can cause injury or death.

W-2052-0907

Figure 112

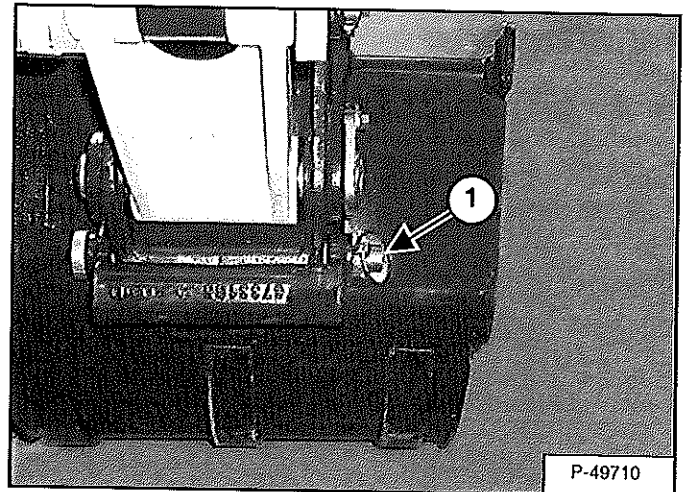


Park the backhoe on a flat level surface. Put the bucket on the ground [Figure 112].

With the engine off, move both hydraulic control levers to relieve hydraulic pressure.

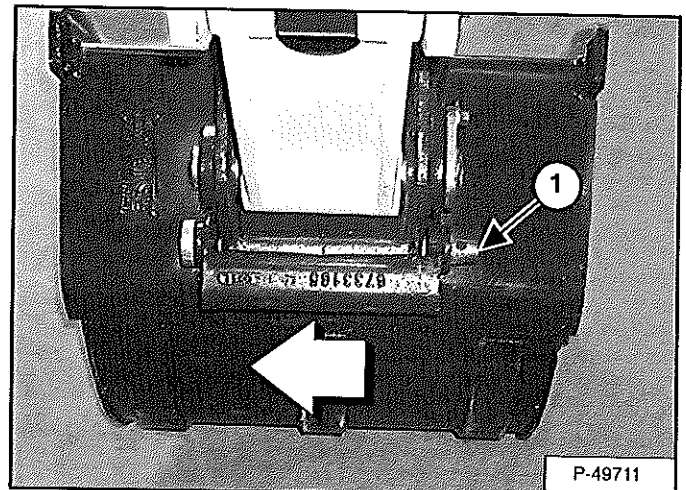
Stop the engine and set the parking brake.

Figure 113



Remove the retainer pin (Item 1) [Figure 113].

Figure 114



Drive the pin (Item 1) [Figure 114] out of the bucket and X-Change mount.

! 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.

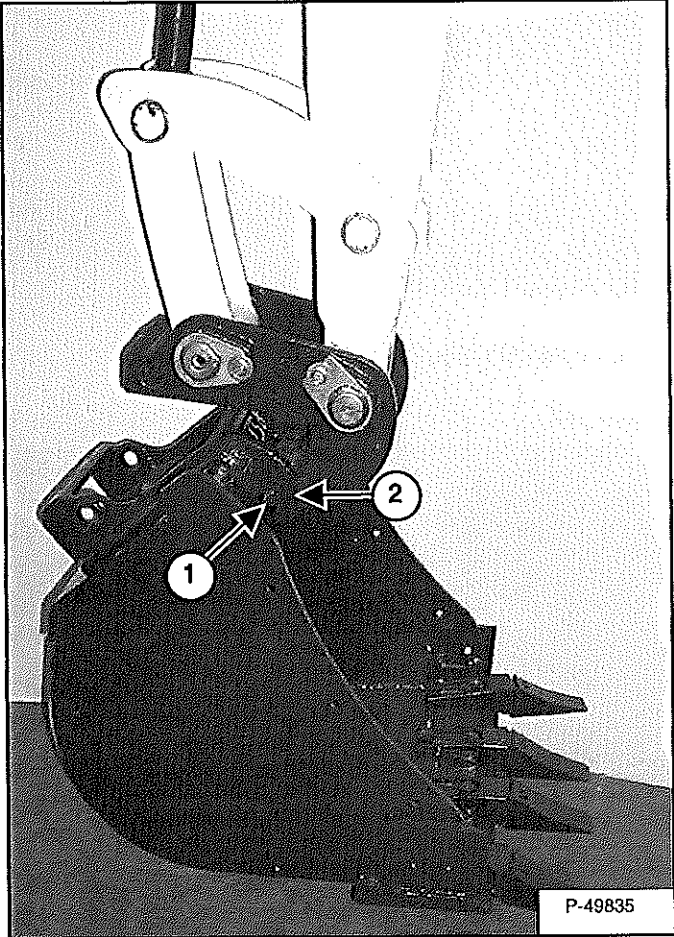
W-2019-0907

OPERATING PROCEDURE WITH LOADERS (CONT'D)

Removal (Cont'd)

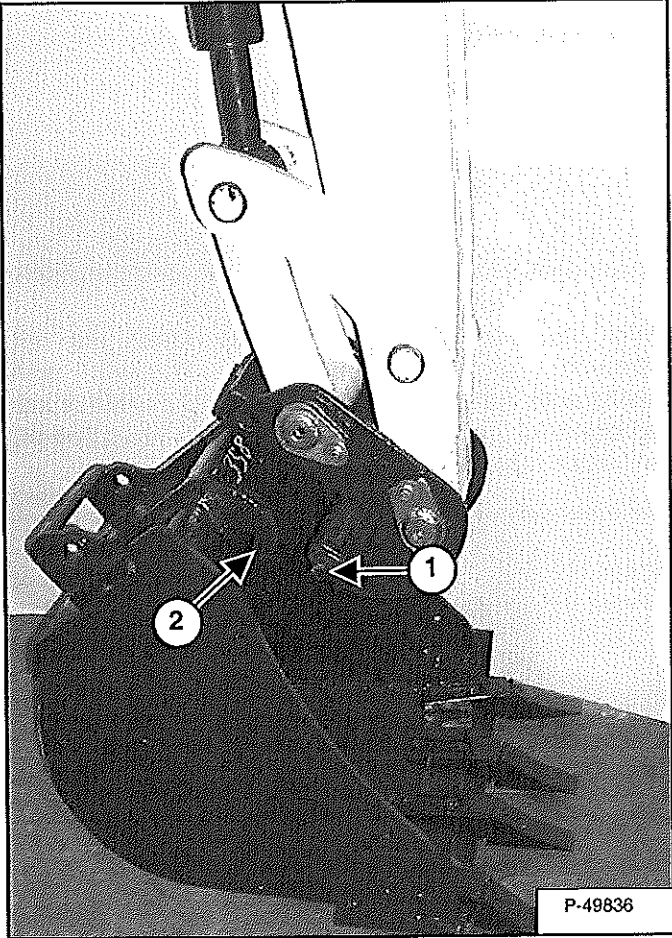
Remove The Bucket (Pin On X-Change) (Cont'd)

Figure 115



Start the engine, raise the boom approximately one foot and retract the bucket cylinder until the X-Change pins (Item 1) engage the hooks (Item 2) [Figure 115] on the bucket.

Figure 116



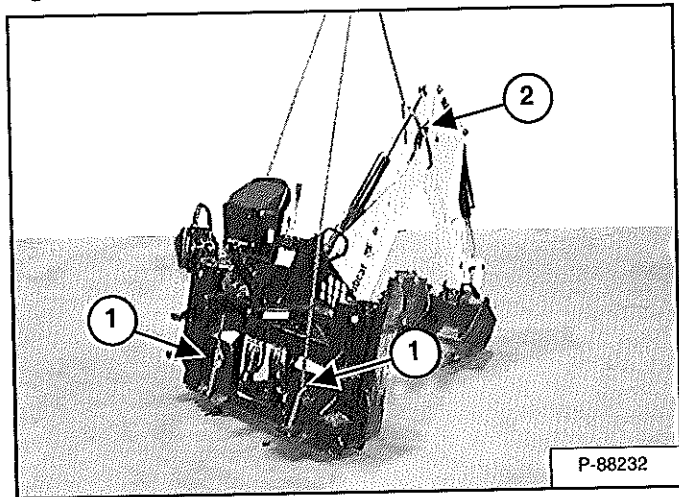
Fully retract the bucket cylinder and lower the boom and arm until the bucket is on the ground, and the X-Change pins (Item 1) are disengaged from the hooks (Item 2) [Figure 116].

Move the arm toward the backhoe until the X-Change pins are clear of the bucket.

LIFTING THE ATTACHMENT

Procedure

Figure 117



NOTE: Use chains that are in good condition and of adequate capacity to lift the attachment.

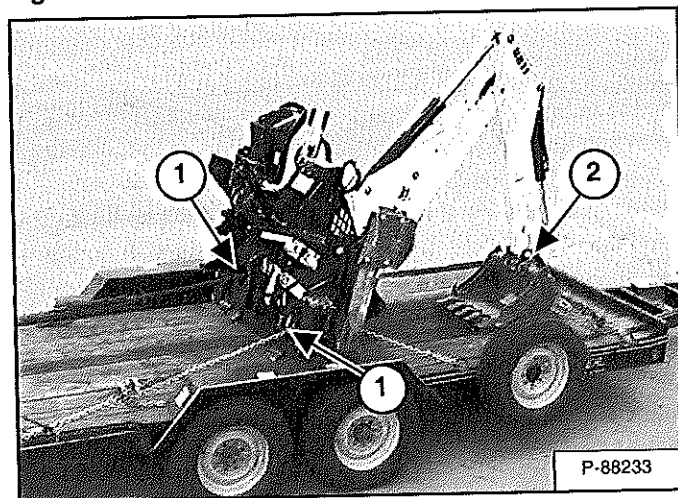
NOTE: DO NOT remove the boom lock pin when the backhoe is NOT attached to the loader.

Install the chains to the backhoe frame (Item 1) and the boom arm (Item 2) [Figure 117].

TRANSPORTING THE ATTACHMENT ON A TRAILER

Fastening

Figure 118



When on the transport vehicle, loop the chains through the holes in the mounting frame (Item 1) [Figure 118].

Loop the chain (Item 2) [Figure 118] around the bucket link.

Use chain binders to prevent the backhoe from moving during transporting.

TRANSPORTING THE ATTACHMENT AND MACHINE ON A TRAILER

Loading And Fastening

! WARNING

AVOID SERIOUS INJURY OR DEATH

Adequately designed ramps of sufficient strength are needed to support the weight of the machine when loading onto a transport vehicle. Wood ramps can break and cause personal injury.

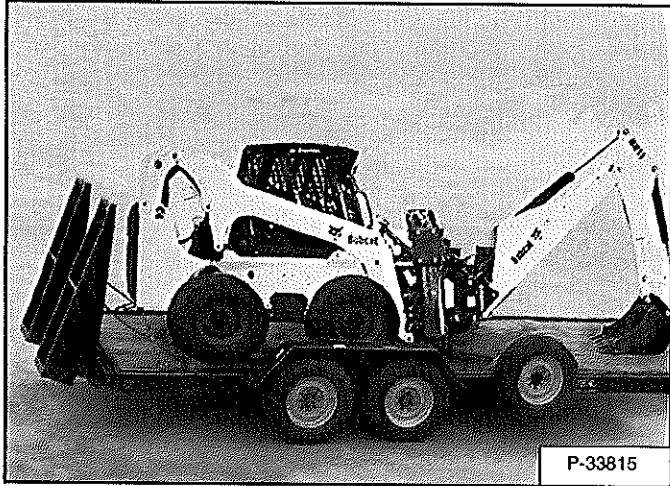
W-2058-0807

Be sure the transport and towing vehicles are of adequate size and capacity for weight of machine and attachment combination. (See machine and attachment Operation & Maintenance Manuals for specifications.)

Loading

The rear of the trailer must be blocked or supported when loading and unloading to prevent the front of the trailer from raising.

Figure 119

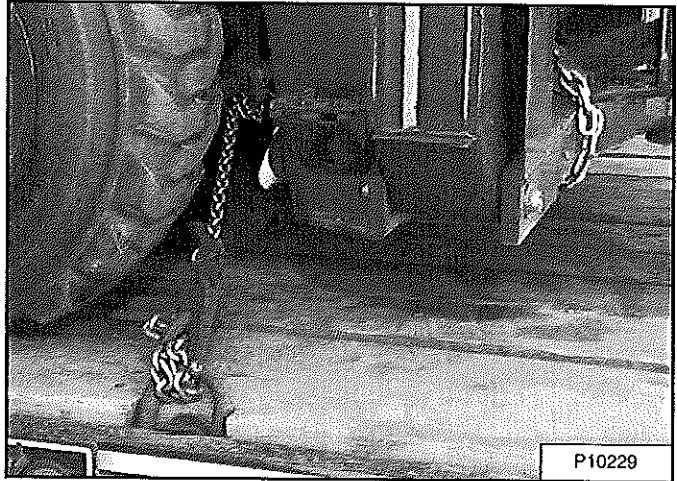


- Load the heaviest end of the machine and attachment combination first [Figure 119].
- Lower the attachment to the floor.
- Stop the engine.
- Engage the parking brake (if equipped).
- Exit the machine. (See the machine's Operation & Maintenance Manual for the correct procedure.)

Fastening

- Install chains at the front and rear tie down positions on the machine. (See the machine's Operation & Maintenance Manual to properly chain the machine to the transport vehicle.)

Figure 120



- Install chains on the attachment (if needed).
- Fasten each end of the chain to the transport vehicle [Figure 120].

NOTE: DO NOT install chains on the stabilizers.

NOTE: Use chain binders to prevent the attachment and machine from moving during transport.

PREVENTIVE MAINTENANCE


TROUBLESHOOTING	73
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Bobcat®

TROUBLESHOOTING

Chart

 <b style="font-size: 1.5em; margin-left: 10px;">WARNING	<p>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.</p> <p style="text-align: right; font-size: 0.8em;">W-2003-0903</p>
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If the attachment is not working correctly, check the hydraulic system of the machine thoroughly before making any repairs on the attachment. Attachment 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 attachment.

TROUBLESHOOTING THE BACKHOE		
PROBLEM	CAUSE	CORRECTION
Loss of hydraulic action.	The auxiliary control on the loader is not engaged.	The auxiliary control must be activated.
	The male and female quick couplers on the backhoe hoses are not installed on the correct hoses.	Reverse the quick couplers on the hydraulic hoses of the backhoe.
	Hydraulic fluid level is low.	*Add fluid of the correct type.
Hydraulic action is not smooth.	Hydraulic fluid level is low.	*Add fluid of the correct type.
	Air in the hydraulic system.	Operate all the cylinders except the swing cylinder as far as possible both ways and hold the controls for several seconds after the cylinders reached the end of the strokes.
No cushion in swing cylinder.	Air in the cylinder caused by a leak or repair of the swing cylinder.	Repair as needed. Remove air from the cylinder.

*See the loader's Operation & Maintenance Manual, Specification Section for the correct type of fluid to use.

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.

I-2067-0499

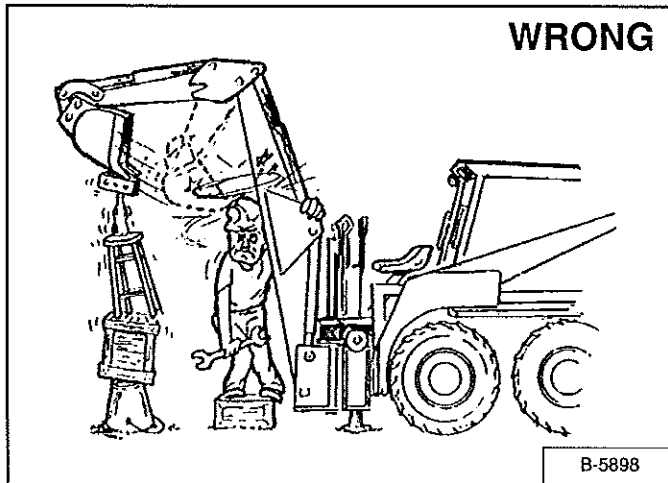
! WARNING

AVOID INJURY OR DEATH

Always lower the Backhoe attachment to the ground before lubricating or servicing.

W-2178-0295

Figure 121

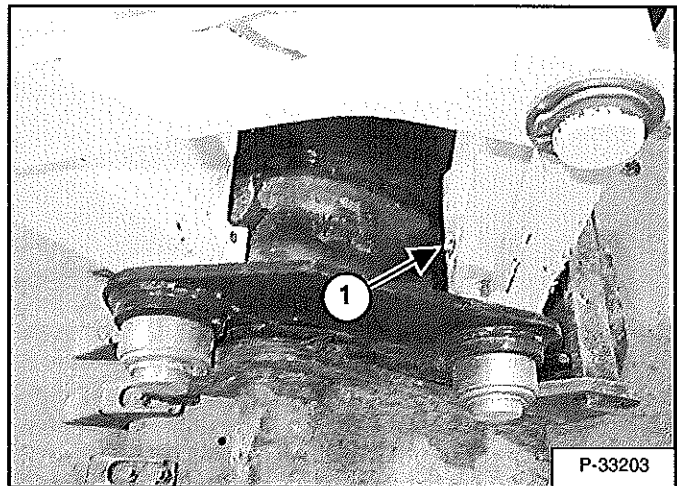


[Figure 121] is an example of what not to do, refer to the warning.

Use only a high grade of lithium based multi-purpose grease. Add grease to the fittings until the extra grease shows.

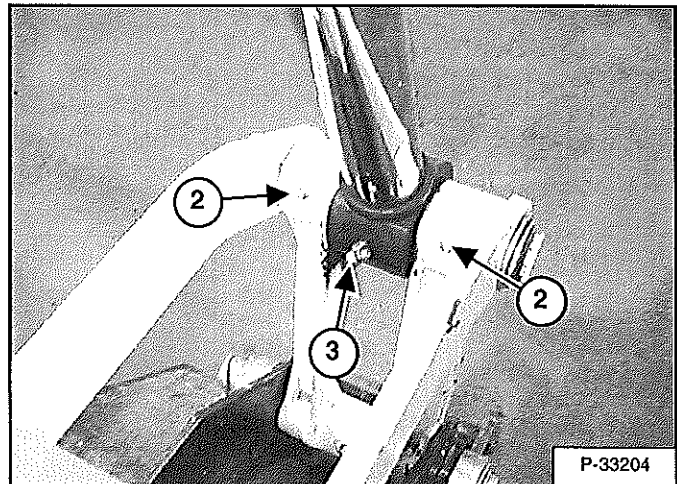
Lubricate the backhoe every **8 HOURS** of operation.

Figure 122



1. Bucket Link (Lower) [Figure 122].

Figure 123

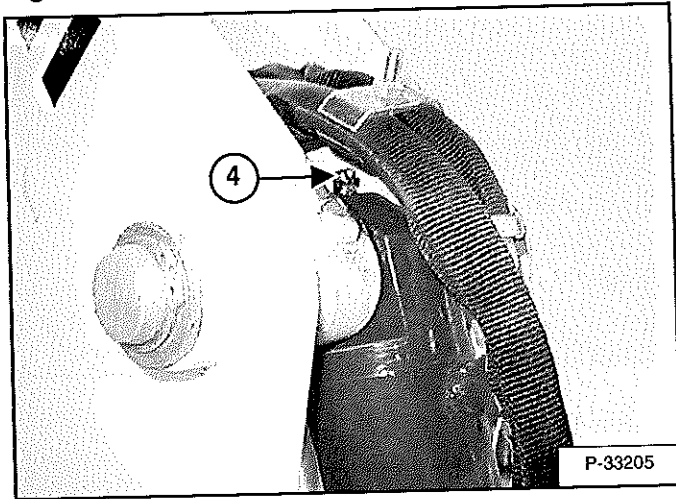


2. Bucket Link (Upper) (2) [Figure 123].
3. Bucket Cylinder Rod End [Figure 123].

LUBRICATING THE ATTACHMENT (CONT'D)

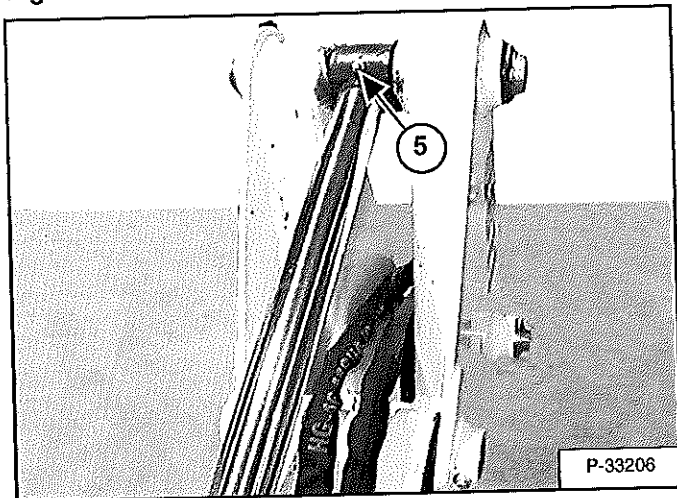
Lubrication Locations (Cont'd)

Figure 124



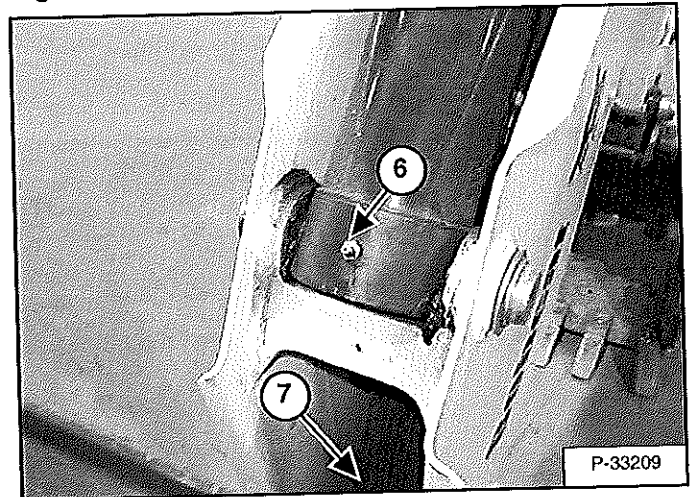
- 4. Bucket Cylinder Base End [Figure 124].

Figure 125



- 5. Arm Cylinder Rod End [Figure 125].

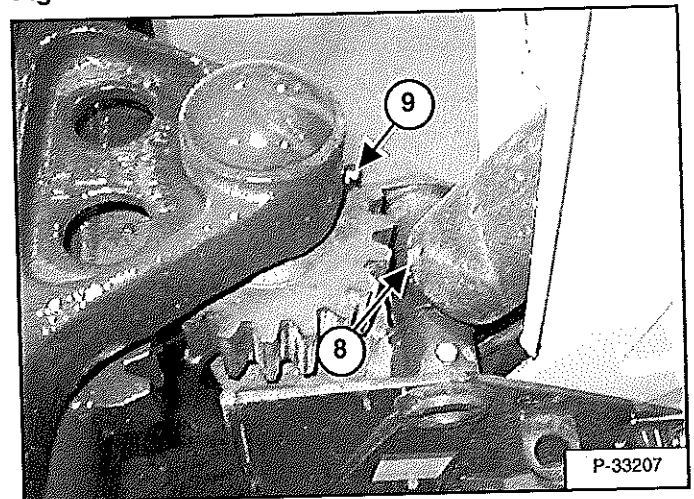
Figure 126



- 6. Arm Cylinder Base End [Figure 126].

- 7. Boom Cylinder Rod End [Figure 126]

Figure 127



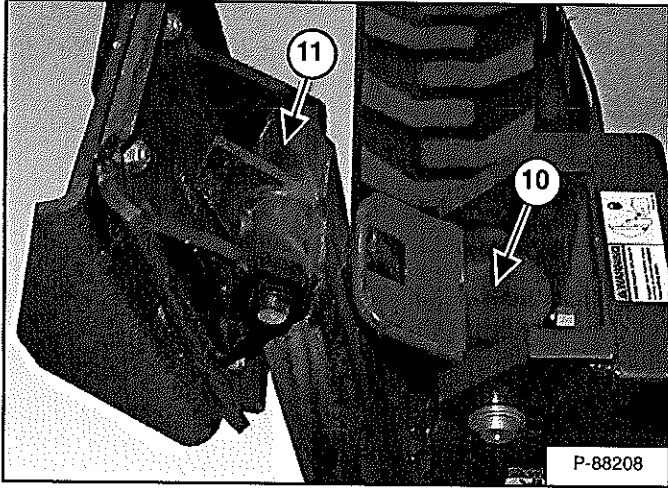
- 8. Boom Cylinder Base End [Figure 127].

- 9. Swing Frame Pivot Bushing (2) [Figure 127].

LUBRICATING THE ATTACHMENT (CONT'D)

Lubrication Locations (Cont'd)

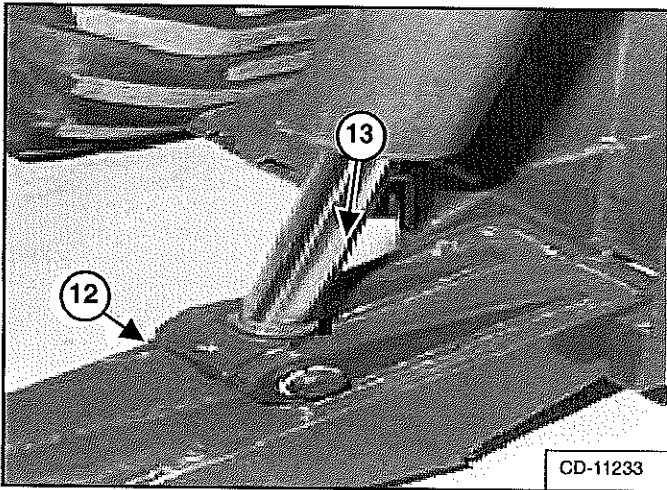
Figure 128



10. Stabilizer Cylinder Base End (2) [Figure 128].

11. Stabilizer Pad Bushing (2) [Figure 128].

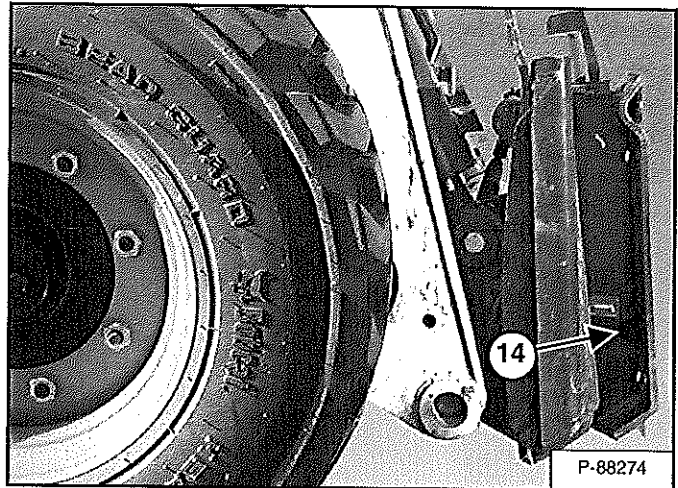
Figure 129



12. Stabilizer Cylinder Rod End (2) [Figure 129].

13. Stabilizer Pivot Bushing (2) [Figure 129].

Figure 130



14. Bob-Tach Adapter (2) [Figure 130].

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: 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.



Bobcat®

MACHINE SIGN TRANSLATIONS

MACHINE SIGN TRANSLATIONS	81
Warning (6535259)	81
Warning (6583862) S/N 630100101 & Above, S/N A55809999 & Below	82
Warning (7166144) S/N A55810000 & Above	83
Warning (6714911)	84
Warning (6596591)	85
Warning (6587106)	86
Warning (6714920)	87
Mounting (7172327) S/N A55810000 & Above	88
X-Change (6806121)	91
X-Change (6818059)	92



Bobcat®

MACHINE SIGN TRANSLATIONS

Warning (6535259)

! WARNING

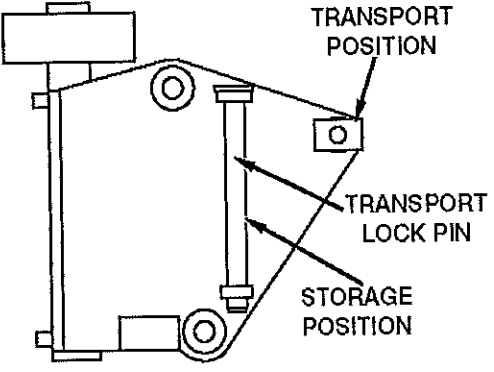


Diagram showing the boom lock pin in the transport position. Labels: TRANSPORT POSITION, TRANSPORT LOCK PIN, STORAGE POSITION.

AVOID INJURY OR DEATH
Boom lock pin must be in transport position when transporting the backhoe.

SW 98 6535259

! ADVERTENCIA

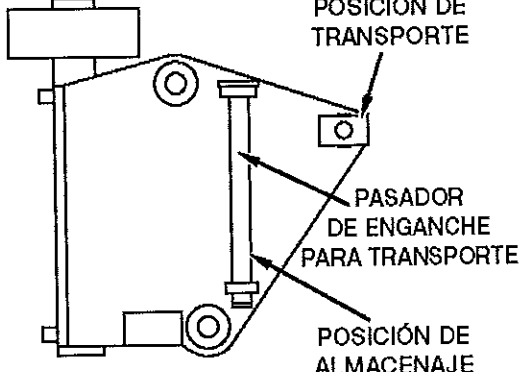


Diagram showing the boom lock pin in the transport position. Labels: POSICIÓN DE TRANSPORTE, PASADOR DE ENGANCHE PARA TRANSPORTE, POSICIÓN DE ALMACENAJE.

EVITE LESIONES O MUERTE
El pasador de enganche del pescante debe estar en posición de transporte al trasladar la retroexcavadora.

35142 SW 98 6535259 AR

! ADVERTÊNCIA

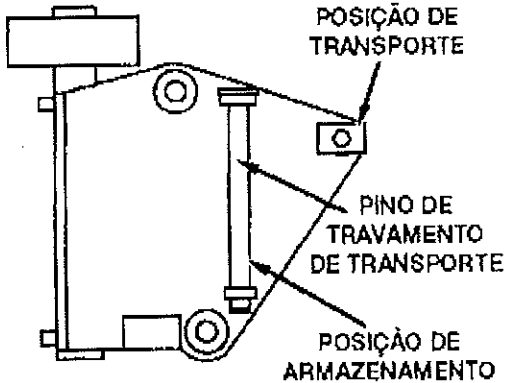


Diagram showing the boom lock pin in the transport position. Labels: POSIÇÃO DE TRANSPORTE, PINO DE TRAVAMENTO DE TRANSPORTE, POSIÇÃO DE ARMAZENAMENTO.

EVITE FERIMENTOS OU MORTE
O pino de travamento da lança deve estar na posição de transporte durante o transporte da retroescavadeira.

SW 97 6535250 BR

MACHINE SIGN TRANSLATIONS (CONT'D)

Warning (6583862) S/N 630100101 & Above, S/N A55809999 & Below

 **WARNING**

**AVOID INJURY
OR DEATH**

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

67172 SW 6583862C enUS

 **ADVERTENCIA**

**EVITE LESIONES
O LA MUERTE**

**Manténgase alejado a una
distancia de 10 pies (3 m) de
la máquina y de los accesorios
cuando se encuentren en
funcionamiento.**

67172 SW 6583862C esAR

 **ADVERTÊNCIA**

**EVITE FERIMENTOS
OU MORTE**

**Fique distante 10 pés
(3m) da carregadora
e acessório quando
em uso.**

33973 SW 9A 6583862 BR

MACHINE SIGN TRANSLATIONS (CONT'D)

Warning (7166144) S/N A55810000 & Above

! WARNING



CRUSHING HAZARD CAN CAUSE SERIOUS INJURY OR DEATH

- Keep out of swing area.
- Operate backhoe from operator's position only.
- Keep away from stabilizers.

73054 SW 7166144 enUS

! ADVERTENCIA



EL PELIGRO DE APLASTAMIENTO PUEDE PROVOCAR LESIONES GRAVES O LA MUERTE

- Apártese del área de giro.
- Haga funcionar la retroexcavadora sólo desde la posición del operador.
- Manténgase alejado de los estabilizadores.

73054 SW 7166144 esAR

! AVERTISSEMENT



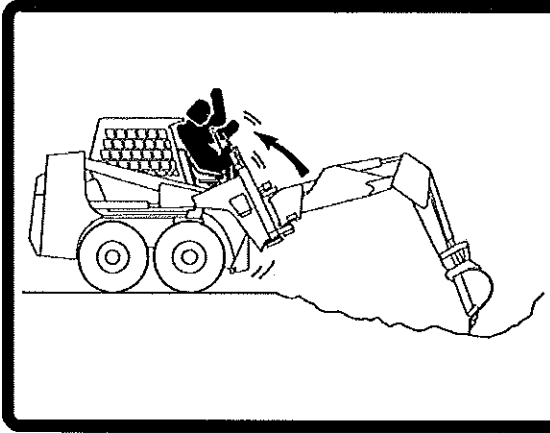
TOUT ÉCRASEMENT PEUT PROVOQUER DES BLESSURES GRAVES OU LA MORT

- Restez éloigné de la zone d'oscillation.
- Faites fonctionner la pelle rétro uniquement depuis la position de l'opérateur.
- Restez éloigné des stabilisateurs.

73054 SW 7166144 frCA

MACHINE SIGN TRANSLATIONS (CONT'D)

Warning (6714911)

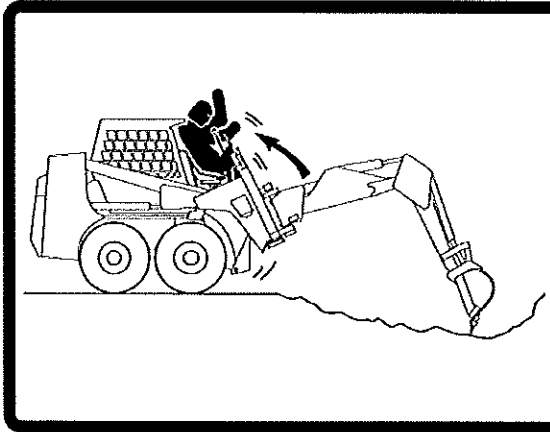


⚠ WARNING

BACKHOE FRAME CAN ROTATE BACKWARD AND TRAP OPERATOR CAUSING SERIOUS INJURY OR DEATH BEFORE OPERATING BACKHOE:

- Fully engage both Bob-Tach locking levers so wedges extend through mounting frame holes.
- Tighten and fasten safety chain around Bob-Tach and mounting frame.
- Repair or replace safety chain if damaged. Use only approved .375 inch Grade 70 Transport Chain.
- See "ATTACHING AND REMOVING THE BACKHOE" decal on backhoe and Backhoe Operation & Maintenance Manual for more instructions.

74124 SW 6714911A enUS

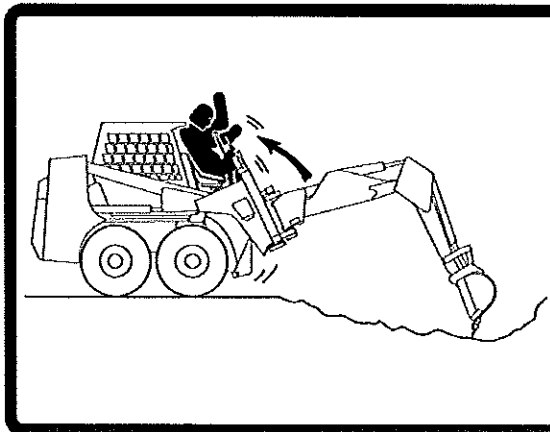


⚠ ADVERTENCIA

LA ESTRUCTURA DE LA RETROEXCAVADORA PUEDE GIRAR HACIA ATRÁS Y ATRAPAR AL OPERADOR, LO QUE PODRÍA PROVOCAR LESIONES GRAVES O LA MUERTE ANTES DE COMENZAR A OPERAR LA RETROEXCAVADORA:

- Conecte completamente ambas palancas de bloqueo Bob-Tach de manera que las cuñas pasen por los orificios de la estructura de montaje.
- Ajuste y asegure la cadena de seguridad alrededor de Bob-Tach y de la estructura de montaje.
- Repare o reemplace la cadena de seguridad si está dañada. Utilice únicamente cadenas aprobadas de transporte grado 70 de 0,375 pulgadas (9,5 mm).
- Consulte la etiqueta "CÓMO CONECTAR Y QUITAR LA RETROEXCAVADORA" que allí se encuentra, y el Manual de funcionamiento y mantenimiento de la retroexcavadora para obtener más instrucciones.

74124 SW 6714911A esAR



⚠ AVERTISSEMENT

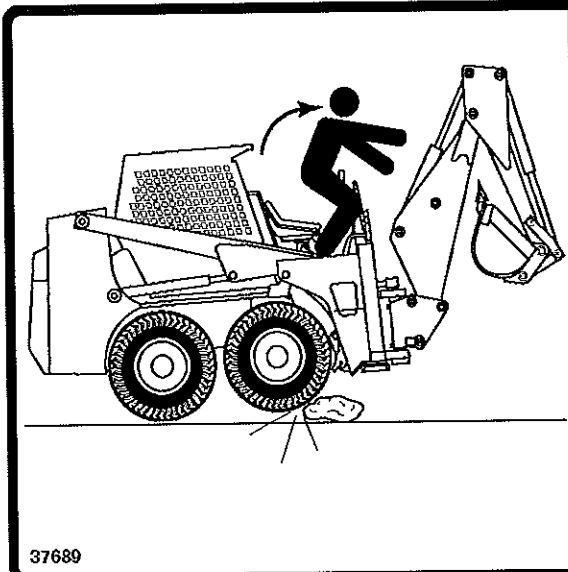
LE CHÂSSIS DE LA PELLE RÉTRO PEUT TOURNER VERS L'ARRIÈRE ET PIÉGER L'OPÉRATEUR, PROVOQUANT BLESSURES GRAVES OU LA MORT AVANT D'UTILISER LA PELLE RÉTRO :

- Engagez les deux leviers du Bob-Tach à fond afin que les cales dépassent des orifices du châssis de fixation.
- Serrez la chaîne de sécurité, une fois passée autour du Bob-Tach et du châssis de fixation, et attachez-la.
- Réparez ou remplacez la chaîne de sécurité si elle est endommagée. N'utilisez qu'une chaîne pour transport approuvée de 0,375 po, grade 70.
- Consultez l'autocollant « ATTACHING AND REMOVING THE BACKHOE » (FIXATION ET DÉPOSE DE LA PELLE RÉTRO) sur la pelle rétro et le manuel d'utilisation et d'entretien pour obtenir d'autres instructions.

74124 SW 6714911A frCA

MACHINE SIGN TRANSLATIONS (CONT'D)

Warning (6596591)



37689

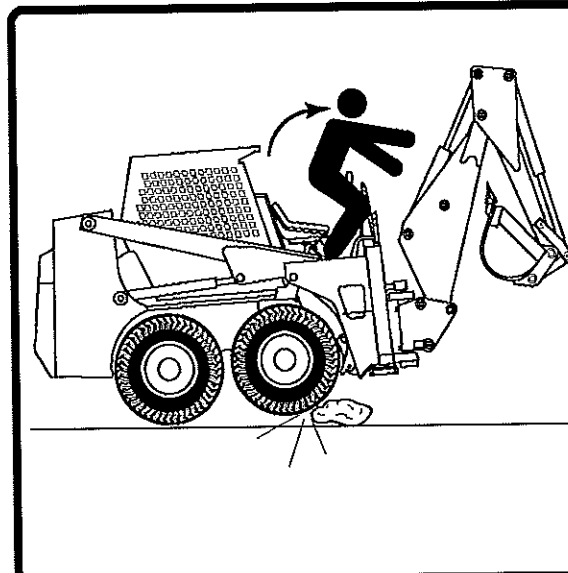
⚠ WARNING

AVOID INJURY OR DEATH

Operate from the backhoe seat only when digging or moving the loader 5 ft. (1.5 m) or less, on level ground away from the excavation.

Move to the loader seat, fasten seat belt and lower seat bar (if equipped) when driving in all other conditions.

SW 98 6596591



37689

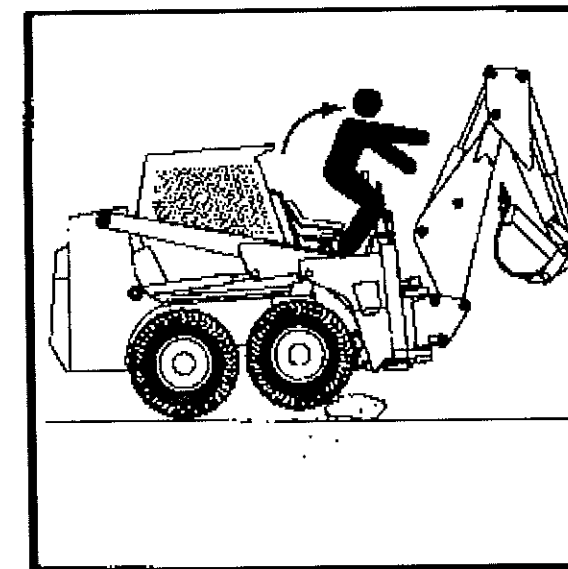
⚠ ADVERTENCIA

EVITE LESIONES O MUERTE

Opere desde el asiento de la retroexcavadora sólo cuando esté excavando o moviendo la cargadora a 5 pies (1,5 m) o menos, sobre terreno plano y lejos de la excavación.

Diríjase al asiento de la cargadora, ajústese el cinturón de seguridad y baje la barra del asiento (si está incluida en el equipo) cuando conduzca en cualquier otra situación.

SW 98 6596591 AR



⚠ ADVERTÊNCIA


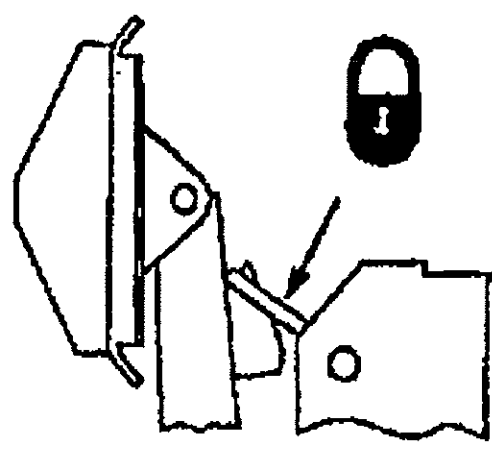
EVITE FERIMENTOS OU MORTE


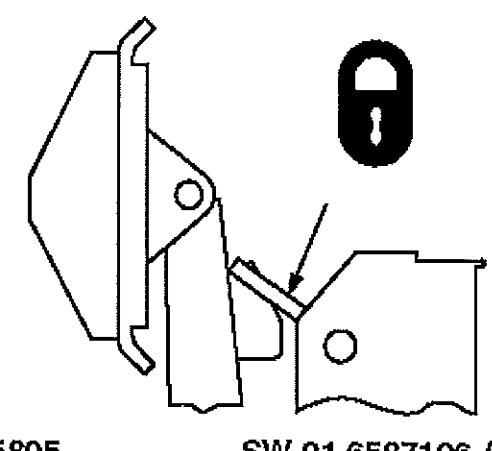
Opere apenas do assento da retroescavadeira quando cavar ou mover a carregadora distando da escavação 5 pés (1,5 m) ou menos, ao nível do solo.

Vá para o assento da carregadora, aperte o cinto de segurança e abaixe a barra do assento (caso exista) quando dirigir em todas as outras condições.

SW 97 6596591 BR

Warning (6587106)

 WARNING	 6587106
AVOID INJURY OR DEATH Engage lock before transporting to prevent stabilizer from drifting down.	

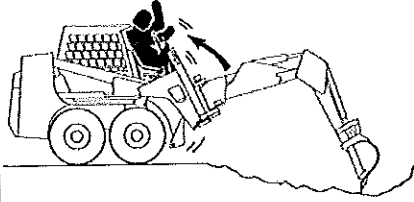
 ADVERTENCIA	 35895 SW 01 6587106 AR
EVITE LESIONES O LA MUERTE ASEGURE el enganche antes de trasladarse para evitar que el estabilizador se deslice.	

 ADVERTÊNCIA	 35895 SW 05 6587106 BR
EVITE FERIMENTOS OU MORTE Engate a trava antes de transportar, para evitar a queda do estabilizador.	

MACHINE SIGN TRANSLATIONS (CONT'D)

Warning (6714920)

WARNING



BACKHOE FRAME CAN ROTATE BACKWARD AND TRAP OPERATOR CAUSING SERIOUS INJURY OR DEATH BEFORE OPERATING BACKHOE:

- Fully engage both Bob-Tach locking levers so wedges extend through mounting frame holes.
- Tighten and fasten safety chain around Bob-Tach and mounting frame.
- Repair or replace safety chain if damaged. Use only approved .375 inch Grade 70 Transport Chain.
- See "ATTACHING AND REMOVING THE BACKHOE" decal on backhoe and Backhoe Operation & Maintenance Manual for more instructions.

74124 SW 6714920A enUS
SEE THE MANUAL FOR INSTALLATION INSTRUCTIONS

ADVERTENCIA



LA ESTRUCTURA DE LA RETROEXCAVADORA PUEDE GIRAR HACIA ATRÁS Y ATRAPAR AL OPERADOR, LO QUE PODRÍA PROVOCAR LESIONES GRAVES O LA MUERTE ANTES DE COMENZAR A OPERAR LA RETROEXCAVADORA:

- Conecte completamente ambas palancas de bloqueo Bob-Tach de manera que las cuñas pasen por los orificios de la estructura de montaje.
- Ajuste y asegure la cadena de seguridad alrededor de Bob-Tach y de la estructura de montaje.
- Repare o reemplace la cadena de seguridad si está dañada. Utilice únicamente cadenas aprobadas de transporte grado 70 de 0,375 pulgadas (9,5 mm).
- Consulte la etiqueta "CÓMO CONECTAR Y QUITAR LA RETROEXCAVADORA" que allí se encuentra, y el Manual de funcionamiento y mantenimiento de la retroexcavadora para obtener más instrucciones.

74124 SW 6714920A esAR
SEE THE MANUAL FOR INSTALLATION INSTRUCTIONS

AVERTISSEMENT



LE CHÂSSIS DE LA PELLE RÉTRO PEUT TOURNER VERS L'ARRIÈRE ET PIÉGER L'OPÉRATEUR, PROVOQUANT BLESSURES GRAVES OU MORTELLES AVANT D'UTILISER LA PELLE RÉTRO :

- Engagez les deux leviers du Bob-Tach à fond afin que les cales dépassent des orifices du châssis de fixation.
- Serrez la chaîne de sécurité, une fois passée autour du Bob-Tach et du châssis de fixation, et attachez-la.
- Réparez ou remplacez la chaîne de sécurité si elle est endommagée. N'utilisez qu'une chaîne pour transport approuvée de 0,375 po, grade 70.
- Consultez l'autocollant « ATTACHING AND REMOVING THE BACKHOE » (FIXATION ET DÉPOSE DE LA PELLE RÉTRO) sur la pelle rétro et le manuel d'utilisation et d'entretien pour obtenir d'autres Instructions.

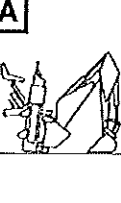
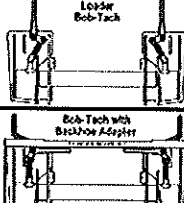
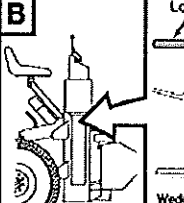
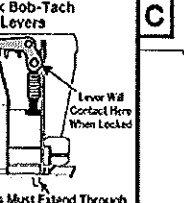
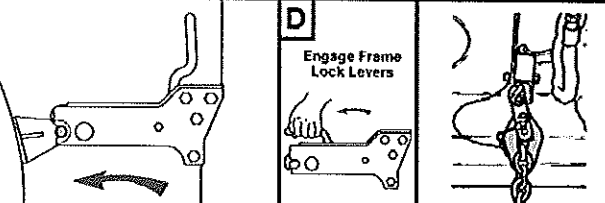
74124 SW 6714920A frCA
SEE THE MANUAL FOR INSTALLATION INSTRUCTIONS

MACHINE SIGN TRANSLATIONS (CONT'D)

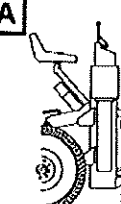
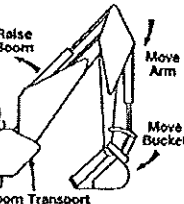
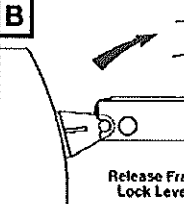
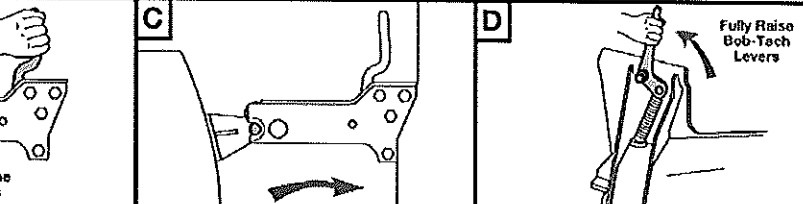

Mounting (7172327) S/N A55810000 & Above

ATTACHING AND REMOVING THE BACKHOE

To Attach The Backhoe

 <p>B-13103</p>	 <p>Lock Bob-Tach Levers</p> <p>Lever Will Contact Here When Locked</p> <p>Wedges Must Extend Through Backhoe Mounting Frame Holes</p> <p>B-13107</p>	 <p>B-13105</p>	 <p>Engage Frame Lock Levers</p> <p>B-13106</p>	 <p>Fasten Safety chain</p>
<ol style="list-style-type: none"> Place the backhoe in the position shown above. Install Bob-Tach Backhoe Adapter, if required. See Operation & Maintenance Manual for more information. Position the Bob-Tach levers as shown. Lower seat bar and fasten seat belt. Start the engine. Drive the loader forward until the Bob-Tach is in the backhoe mounting frame. 	<ol style="list-style-type: none"> Raise the lift arms and tilt the Bob-Tach backward to fully engage the Bob-Tach into the backhoe mounting frame. STOP THE ENGINE, RELEASE THE SEAT BELT AND RAISE THE SEAT BAR. Engage the parking brake. Lock the Bob-Tach levers. BOB-TACH WEDGES MUST EXTEND THROUGH BACKHOE MOUNTING FRAME HOLES. Connect the hydraulic hoses from the backhoe to the auxiliary couplers. 	<ol style="list-style-type: none"> Return to loader seat, lower seat bar and fasten seat belt. Start the engine. Adjust lift arms and tilt Bob-Tach backward until slots in mounts contact pins. 	<ol style="list-style-type: none"> STOP THE ENGINE, RELEASE THE SEAT BELT AND RAISE THE SEAT BAR. Engage the parking brake. Engage the backhoe frame lock levers to lock the backhoe on the loader. TIGHTEN AND FASTEN SAFETY CHAIN AROUND THE LOADER BOB-TACH AND BACKHOE MOUNTING FRAME. Remove boom transport lock pin and place in storage position for backhoe operation. 	

To Remove The Backhoe

 <p>Raise Boom</p> <p>Move Arm</p> <p>Move Bucket</p> <p>Boom Transport Lock Pin</p> <p>B-13107</p>	 <p>Release Frame Lock Levers</p> <p>B-13108</p>		 <p>Fully Raise Bob-Tach Levers</p> <p>MC-1767</p>
<ol style="list-style-type: none"> Engage the parking brake. Start the engine and tilt the Bob-Tach backwards to remove pressure on the mounting hooks. Engage the auxiliary hydraulics. Move to the backhoe seat. Raise the backhoe boom and position it to the center of the loader. Position the arm vertically and the bucket cutting edge parallel to the ground. Retract the backhoe stabilizers. STOP THE ENGINE. Exit the machine. Install the boom transport lock pin to lock the boom in place. 	<ol style="list-style-type: none"> Release the backhoe frame lock levers to release the backhoe from the loader. Enter the loader. Lower the seat bar and fasten the seat belt. Start the engine. 	<ol style="list-style-type: none"> Tilt the Bob-Tach forward until the bucket contacts the ground. STOP THE ENGINE, RELEASE THE SEAT BELT AND RAISE THE SEAT BAR. Engage the parking brake. Exit the machine. 	<ol style="list-style-type: none"> Disconnect the auxiliary hoses. Connect the hoses to each other. Disconnect safety chain. Fully Raise the Bob-Tach Levers. Lower the seat bar and fasten the seat belt. Start the engine and release the parking brake. Tilt Bob-Tach forward, lower the lift arms and move backward from the backhoe mounting frame.
 SEE ATTACHMENT OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.			

71208 REV 7172327A 00-05

MACHINE SIGN TRANSLATIONS (CONT'D)

Mounting (7172327) S/N A55810000 & Above (Cont'd)

CÓMO CONECTAR Y QUITAR LA RETROEXCAVADORA

Para conectar la retroexcavadora

A

B

C

D

1. Coloque la retroexcavadora en la posición que se indica arriba.
2. Instale un adaptador para retroexcavadora Bob-Tach si es necesario. Consulte el Manual de funcionamiento y mantenimiento para obtener más información.
3. Ubique las palancas Bob-Tach como se indica.
4. Baje la barra del asiento y ajústese el cinturón de seguridad. Encienda el motor.
5. Lleve la cargadora hacia adelante hasta que la unidad Bob-Tach esté en la estructura de montaje de la retroexcavadora.
6. Levante los brazos de elevación e incline la unidad Bob-Tach hacia atrás para conectarla por completo a la estructura de montaje de la retroexcavadora.
7. **DETENGA EL MOTOR, SUELTE EL CINTURÓN DE SEGURIDAD Y ELEVE LA BARRA DEL ASIENTO.**
8. Conecte el freno de estacionamiento.
9. Bloquee las palancas Bob-Tach. **LAS CUÑAS BOB-TACH DEBEN PASAR POR LOS ORIFICIOS DE LA ESTRUCTURA DE MONTAJE DE LA RETROEXCAVADORA.**
10. Conecte las mangueras hidráulicas desde la retroexcavadora a los accesorios auxiliares.
11. Vuelva al asiento de la cargadora, baje la barra del asiento y ajústese el cinturón de seguridad.
12. Encienda el motor.
13. Ajuste los brazos de elevación e incline la unidad Bob-Tach hacia atrás hasta que las ranuras de los montajes hagan contacto con las cuñas.
14. **DETENGA EL MOTOR, SUELTE EL CINTURÓN DE SEGURIDAD Y ELEVE LA BARRA DEL ASIENTO.**
15. Conecte el freno de estacionamiento.
16. Conecte las palancas de bloqueo de la estructura de la retroexcavadora para asegurar la retroexcavadora en la cargadora.
17. **AJUSTE Y ASEGURE LA CADENA DE SEGURIDAD ALREDEDOR DE LA CARGADORA BOB-TACH Y LA ESTRUCTURA DE MONTAJE DE LA RETROEXCAVADORA.**
18. Retire la clavija de bloqueo de transporte de extensión y colóquela en posición de almacenamiento para el funcionamiento de la retroexcavadora.

Para quitar la retroexcavadora

A

B

C

D

1. Conecte el freno de estacionamiento.
2. Encienda el motor e incline la unidad Bob-Tach hacia atrás para quitar presión de los ganchos de montaje.
3. Conecte la hidráulica auxiliar. Vaya al asiento de la retroexcavadora.
4. Eleve la extensión de la retroexcavadora y colóquela en el centro de la cargadora.
5. Ubique el brazo en forma vertical y los bordes de corte del cucharón paralelos al suelo.
6. Retire los estabilizadores de la retroexcavadora.
7. **DETENGA EL MOTOR.** Saiga de la unidad.
8. Instale la clavija de bloqueo del transporte de extensión para asegurar la extensión en su lugar.
9. Desconecte las palancas de bloqueo de la estructura de la retroexcavadora para soltar la retroexcavadora de la cargadora.
10. Ingrese a la cargadora, baje la barra del asiento y ajústese el cinturón de seguridad.
11. Encienda el motor.
12. Inclíne la unidad Bob-Tach hacia adelante hasta que el cucharón haga contacto con el suelo.
13. **DETENGA EL MOTOR, SUELTE EL CINTURÓN DE SEGURIDAD Y ELEVE LA BARRA DEL ASIENTO.**
14. Conecte el freno de estacionamiento. Saiga de la unidad.
15. Desconecte las mangueras auxiliares. Conecte las mangueras entre sí.
16. Desconecte la cadena de seguridad.
17. Eleve completamente las palancas Bob-Tach.
18. Baje la barra del asiento y ajústese el cinturón de seguridad.
19. Encienda el motor y desconecte el freno de estacionamiento. Inclíne la unidad Bob-Tach hacia adelante, bajo los brazos de elevación y muvase hacia atrás de la estructura de montaje de la retroexcavadora.

CONSULTE EL MANUAL DE FUNCIONAMIENTO Y MANTENIMIENTO DE LOS ACCESORIOS PARA OBTENER MÁS INFORMACIÓN.

MACHINE SIGN TRANSLATIONS (CONT'D)

Mounting (7172327) S/N A55810000 & Above (Cont'd)

INSTALLATION ET DÉINSTALLATION DE LA PELLE RÉTRO

Pose de la pelle rétro

<p>B-13103</p>	<p>B-13107</p>	<p>B-13105</p>	<p>B-13106</p>	<p>Attachez la chaîne de sécurité</p>
<ol style="list-style-type: none"> 1. Mettez la pelle rétro à la position indiquée ci-dessus. 2. Installez au besoin l'adaptateur Bob-Tach de la pelle rétro. Consultez le manuel d'entretien et d'utilisation pour plus d'informations. 3. Verrouillez les leviers du Bob-Tach comme il est illustré. 4. Abaissez l'arceau de siège et bouclez la ceinture de sécurité. Démarrez le moteur. 5. Avancez la chargeuse jusqu'à ce que le Bob-Tach soit inséré dans le châssis de fixation de la pelle rétro. 	<ol style="list-style-type: none"> 6. Relevez les bras de levage et inclinez le Bob-Tach vers l'arrière pour l'engager complètement dans le châssis de fixation de la pelle rétro. 7. ARRÊTEZ LE MOTEUR. DÉBOUCLEZ LA CEINTURE ET RELEVEZ L'ARCEAU DE SIÈGE. 8. Serrez le frein de stationnement. 9. Verrouillez les leviers du Bob-Tach. LES CALES DU BOB-TACH DOIVENT DÉPASSER DES ORIFICES DU CHÂSSIS DE FIXATION DE LA PELLE RÉTRO. 10. Connectez les flexibles hydrauliques aux raccords des aérateurs de la pelle rétro. 	<ol style="list-style-type: none"> 11. Prenez place sur le siège de la chargeuse, abaissez l'arceau de siège et bouclez la ceinture. 12. Démarrez le moteur. 13. Ajustez les bras de levage et inclinez le Bob-Tach vers l'arrière jusqu'à ce que les fentes du support entrent en contact avec les ares. 	<ol style="list-style-type: none"> 14. ARRÊTEZ LE MOTEUR, DÉBOUCLEZ LA CEINTURE ET RELEVEZ L'ARCEAU DE SIÈGE. 15. Serrez le frein de stationnement. 16. Engagez les leviers de verrouillage du châssis pour verrouiller la pelle rétro sur la chargeuse. 17. SERREZ LA CHAÎNE DE SÉCURITÉ, UNE FOIS PASSÉE AUTOUR DU BOB-TACH ET DU CHÂSSIS DE FIXATION, ET ATTACHEZ-LA. 18. Retirez la chenille de transport et mettez-la en position de rangement avant d'usser la pelle rétro. 	

Dépose de la pelle rétro

<p>B-13107</p>	<p>B-13108</p>		<p>MC-1787</p>
<ol style="list-style-type: none"> 1. Serrez le frein de stationnement. 2. Mettez le moteur en marche et inclinez le Bob-Tach vers l'arrière pour éliminer la pression sur les crochets de montage. 3. Engagez les hydrauliques auxiliaires. Prenez place sur le siège de la pelle rétro. 4. Lèvez la flèche de la pelle rétro et positionnez-la au centre de la chargeuse. 5. Positionnez le bras à la verticale et le bord tranchant du godet en parallèle au sol. 6. Rétractez les stabilisateurs. 7. ARRÊTEZ LE MOTEUR. Quittez la machine. 8. Installez la chenille de transport pour verrouiller la flèche en position. 	<ol style="list-style-type: none"> 9. Relâchez les leviers de verrouillage du châssis de fixation pour séparer la pelle rétro de la chargeuse. 10. Entrez dans la chargeuse. Abaissez l'arceau de siège et bouclez la ceinture. 11. Démarrez le moteur. 	<ol style="list-style-type: none"> 12. Inclinez le Bob-Tach vers l'avant pour poser le godet sur le sol. 13. ARRÊTEZ LE MOTEUR. DÉBOUCLEZ LA CEINTURE ET RELEVEZ L'ARCEAU DE SIÈGE. 14. Serrez le frein de stationnement. Quittez. 	<ol style="list-style-type: none"> 15. Déconnectez les flexibles du circuit hydraulique auxiliaire. Branchez les flexibles hydrauliques l'un sur l'autre. 16. Détachez la chaîne de sécurité. 17. Relevez les leviers du Bob-Tach au maximum. 18. Abaissez l'arceau de siège et bouclez la ceinture. 19. Arrêtez le moteur et desserrez le frein de stationnement. Inclinez le Bob-Tach vers l'avant, abaissez les bras de levage et reculez la chargeuse pour l'éloigner du châssis de la pelle rétro.

CONSULTEZ LE MANUEL D'UTILISATION ET D'ENTRETIEN POUR DE PLUS AMPLS RENSEIGNEMENTS.

7172327 S/N 1172327A PCA

MACHINE SIGN TRANSLATIONS (CONT'D)

X-Change (6806121)

USING BOLT-ON X-CHANGE™ SYSTEM	
ATTACHMENT REMOVAL 1. Lower attachment to ground and stop engine. 2. Remove two bolts and plate.	
3. Start engine. Lift boom to allow attachment to drop onto hooks. 4. Fully retract bucket cylinder.	
5. Lower boom until pins disengage from hooks. 6. Move arm toward operator.	
ATTACHMENT INSTALLATION 1. Fully retract bucket cylinder. 2. Engage pins into hooks.	
3. Lift boom and extend cylinder until X-Change frame contacts attachment back. 4. Lower boom and attachment to ground until X-Change fully engages.	
5. Stop engine. 6. Insert two bolts through plate and torque to 130 ft-lbs. 7. Check for proper installation. LIFT attachment and fully extend and retract bucket cylinder.	

68062 SW 03 6806121
 See Operation and Maintenance Manual and Handbook for more instructions and use with other attachments.

USO DEL SISTEMA X-CHANGE™ FIJADO CON PERNOS	
DESINSTALACIÓN DE IMPLEMENTO 1. Descienda el implemento hasta el suelo y detenga el motor. 2. Retire los dos pernos y placa.	
3. Encienda el motor. Eleve el "boom" para permitir que el implemento caiga sobre los ganchos. 4. Retraiga del todo el cilindro del cucharón.	
5. Descienda el "boom" hasta que los pasadores se liberen de los ganchos. 6. Mueva el brazo hacia adentro.	
INSTALACIÓN DE IMPLEMENTO 1. Retraiga del todo el cilindro del cucharón. 2. Coloque los pasadores en los ganchos.	
3. Eleve el "boom" y extienda el cilindro hasta que el marco del X-Change haga contacto con el espaldar de implemento. 4. Descienda el "boom" e implemento hasta el suelo hasta que el X-Change se enganche del todo.	
5. Detenga el motor. 6. Inserte dos pernos a través de la placa y apriete a un torque de 130 lbs-pies. 7. Revise que la instalación sea la correcta. Eleve el implemento, y extienda y retraiga del todo el cilindro del cucharón.	

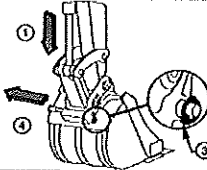
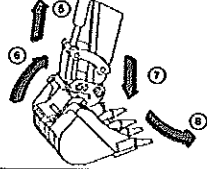
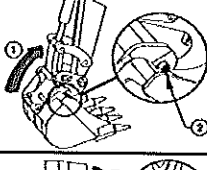
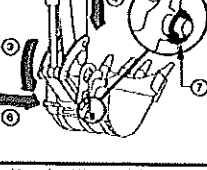
62162 SW 03 6806121 AR
 Ver el Manual de Operación y Mantenimiento y la Guía para más instrucciones y uso con otros implementos.

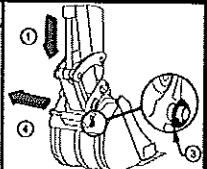
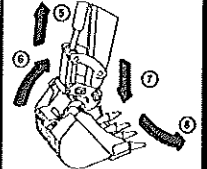
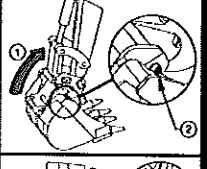
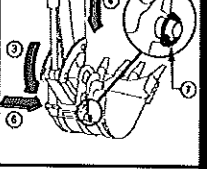
L'ÉCRAN DE VOS SYSTÈME X-CHANGE™	
DÉPOSE DE L'ACCESSOIRE 1. Abaissez l'accessoire au sol et arrêtez le moteur. 2. Retirez les deux boulons et la plaque.	
3. Allumez le moteur. Relevez la flèche pour laisser tomber l'accessoire sur les crochets. 4. Rétractez complètement le vérin de godet.	
5. Abaissez la flèche jusqu'à ce que les broches se libèrent des crochets. 6. Déplacez le bras vers l'opérateur.	
MONTEME DE L'ACCESSOIRE 1. Rétractez complètement le vérin de godet. 2. Engagez les broches dans les crochets.	
3. Relevez la flèche et étendez le vérin jusqu'à ce que le cadre de l'X-Change entre en contact avec l'arrière de l'accessoire. 4. Abaissez la flèche et l'accessoire au sol jusqu'à l'enganchement complet de l'X-Change. 5. Arrêtez le moteur.	
6. Faites passer deux boulons dans la plaque et serrez-les à un couple de 130 Nm. 7. Vérifiez la fixation. Soulevez l'accessoire, étendez et rétractez complètement le vérin de godet.	

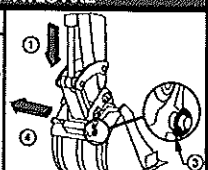
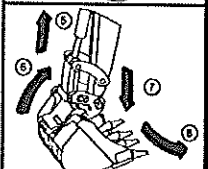
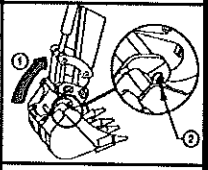
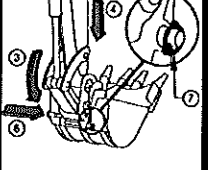
68062 SW 03 6806121 AR
 Consultez le Manuel de l'Opérateur et de l'entretien pour plus de renseignements.

MACHINE SIGN TRANSLATIONS (CONT'D)

X-Change (6818059)

USING THE PIN ON X-CHANGE® SYSTEM	
ATTACHMENT REMOVAL <ol style="list-style-type: none"> Position ARM VERTICAL, lower attachment to ground and stop engine. Turn key to ON position (not start) and move both joysticks to relieve hydraulic pressure. Remove retainer pin. Remove pin. Start engine. Lift boom to disengage attachment. Fully retract bucket cylinder. Lower boom until pins disengage from hooks. Move arm toward operator. 	 
ATTACHMENT INSTALLATION <ol style="list-style-type: none"> Fully retract bucket cylinder. Engage pins into hooks. Lift boom and extend bucket cylinder until X-Change contacts attachment back. Lower boom and attachment to ground WITH ARM VERTICAL until X-Change is fully engaged. Stop engine, turn key to ON position (not start) and move both joysticks to relieve hydraulic pressure. Install pin. Install retainer pin. Check for proper installation. Lift attachment and fully extend and retract bucket cylinder. 	 
<p>See Operation and Maintenance Manual and Handbook for more instructions and use with other attachments. 76191 SW 6818059C enUS 76191 SW 6818059C enUS</p>	

MODO DE USAR EL SISTEMA X-CHANGE® COLOCADO CON PASADORES	
DESINSTALACIÓN DEL IMPLEMENTO <ol style="list-style-type: none"> Coloque en BRAZO en posición VERTICAL, descienda el implemento hasta el suelo y detenga el motor. Gire la llave a la posición ON (no encienda el motor) y mueva ambos joysticks para liberar la presión hidráulica. Retire el pasador retenedor. Retire el pasador. Encienda el motor. Eleve el boom/pluma y libere el implemento. Retraiga del todo el cilindro del cucharón. Descienda el boom/pluma hasta que los pasadores se liberen de los ganchos. Mueva el brazo hacia usted. 	 
INSTALACIÓN DEL IMPLEMENTO <ol style="list-style-type: none"> Retraiga del todo el cilindro del cucharón. Coloque los pasadores dentro de los ganchos. Eleve el boom/pluma y alinee el cilindro del cucharón hasta que el X-Change haga contacto con el espaldar del implemento. Descienda el boom/pluma e implemento hasta el suelo CON EL BRAZO EN POSICIÓN VERTICAL hasta que el X-Change quede totalmente enganchado. Detenga el motor, gire la llave a la posición ON (no encienda el motor) y mueva ambos joysticks para liberar la presión hidráulica. Instale el pasador. Instale el pasador retenedor. Revise que la instalación haya quedado correcta. Eleve el implemento y extienda y retraiga del todo el cilindro del cucharón. 	 
<p>Consulte el Manual de Operación y Mantenimiento y el Manual del Operador para más instrucciones y uso con otros implementos. 76191 SW 6818059C enUS 76191 SW 6818059C enUS</p>	

UTILISATION DU SYSTÈME X-CHANGE® AVEC AXE	
DÉPOSE DE L'ACCESSOIRE <ol style="list-style-type: none"> Placez le BRAS EN POSITION VERTICALE, abaissez l'accessoire sur le sol et arrêtez le moteur. Tournez la clé en position ON (Marche) (pas en position Start (Démarage)) et déplacez les deux manipulateurs pour libérer la pression hydraulique. Déposez la goupille de retenue. Déposez l'axe. Démarez le moteur. Relevez la flèche pour décoller l'accessoire. Rétractez complètement le vérin du godet. Abaissez la flèche jusqu'à ce que les axes se désengagent des crochets. Déplacez le bras vers l'opérateur. 	 
INSTALLATION DE L'ACCESSOIRE <ol style="list-style-type: none"> Rétractez complètement le vérin du godet. Engagez les axes dans les crochets. Relevez la flèche et élevez le vérin du godet jusqu'à ce que le X-Change entre en contact avec l'arrière de l'accessoire. Abaissez la flèche et l'accessoire sur le sol AVEC LE BRAS VERTICAL jusqu'à ce que le X-Change s'engage complètement. Arrêtez le moteur, tournez la clé en position ON (Marche) (pas en position Start (Démarage)) et déplacez les deux manipulateurs pour libérer la pression hydraulique. Installez l'axe. Installez la goupille de retenue. Vérifiez que le montage est correct. Lève l'accessoire puis déployez et rétractez complètement le vérin du godet. 	 
<p>Consultez le manuel d'utilisation et d'entretien et le guide de l'utilisateur pour plus d'instructions et pour toute utilisation avec d'autres accessoires. 76191 SW 6818059C enUS 76191 SW 6818059C enUS</p>	

SPECIFICATIONS

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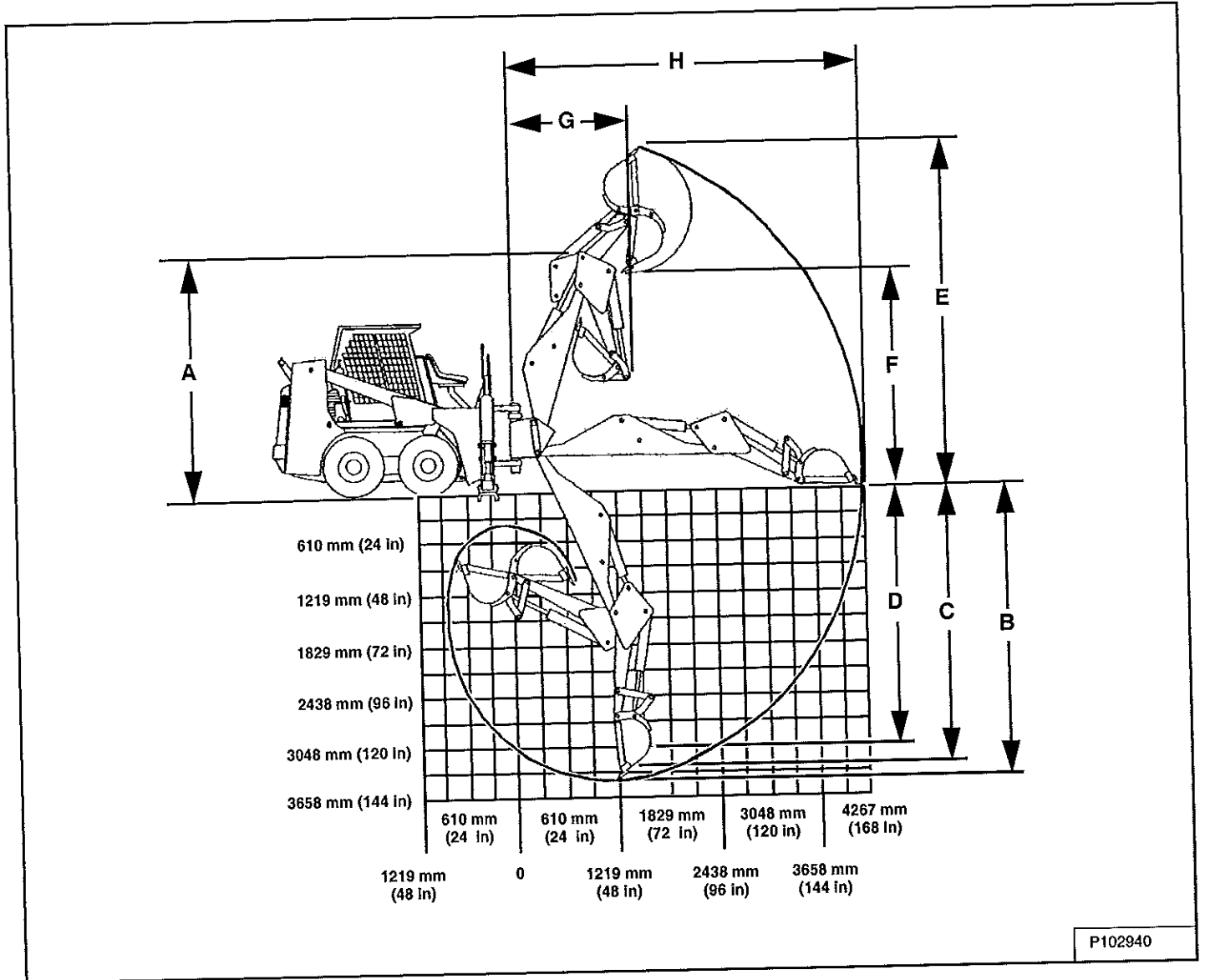


Bobcat®

(8811 BACKHOE) SPECIFICATIONS

Dimensions

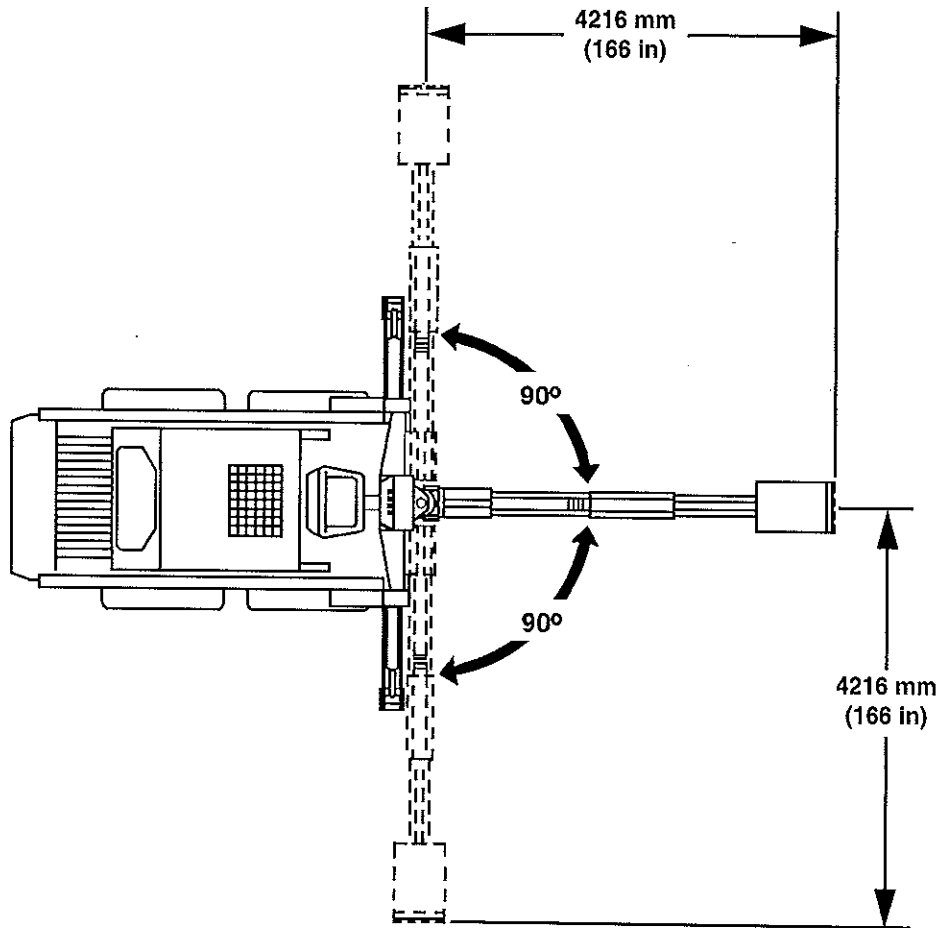
- Dimensions are given for loader equipped with standard tires and dirt bucket. Dimensions may vary with other types. All dimensions are shown in millimeters. Respective imperial dimensions are given in inches enclosed by parentheses.
- Where applicable, specifications conform to SAE or ISO standards and are subject to change without notice.



DESCRIPTION	8811 BACKHOE
Transport Height (A)	2715 mm (106.9 in)
Digging Depth-Maximum (B)	3447 mm (135.7 in)
Digging Depth 0,6 m (2 ft) Flat Bottom (C)	3424 mm (134.8 in)
Digging Depth 2,4 m (8 ft) Flat Bottom (D)	3030 mm (119.3 in)
Overall Operating Height Fully Raised (E)	4089 mm (161.0 in)
Loading Height Standard Bucket Position (F)	2540 mm (100.0 in)
Loading Reach Standard Bucket Position (G)	1504 mm (59.2 in)
Reach From Swing Pivot (H)	4216 mm (166.0 in)

(8811 BACKHOE) SPECIFICATIONS (CONT'D)

Performance



P102941

DESCRIPTION	8811 BACKHOE
Backhoe Weight (W/O Bucket)	913 kg (2012 lb)
Swing Pivot to Front Wheels	1014 mm (39.9 in)
Stabilizer Spread (Transport)	1786 mm (70.3 in)
Stabilizer Spread (Operating)	3310 mm (130.3 in)
Ground Clearance	104 mm (4.1 in)
Bucket Rotating	200°
Swing Arc	180°
Leveling Angle	11.7°
Angle of Approach	12.3°

(8811 BACKHOE) SPECIFICATIONS (CONT'D)**Controls**

DESCRIPTION	8811 BACKHOE
Boom, Arm, Bucket & Swing	Two Hand Levers
Stabilizers	Two Hand Levers

Hydraulic System

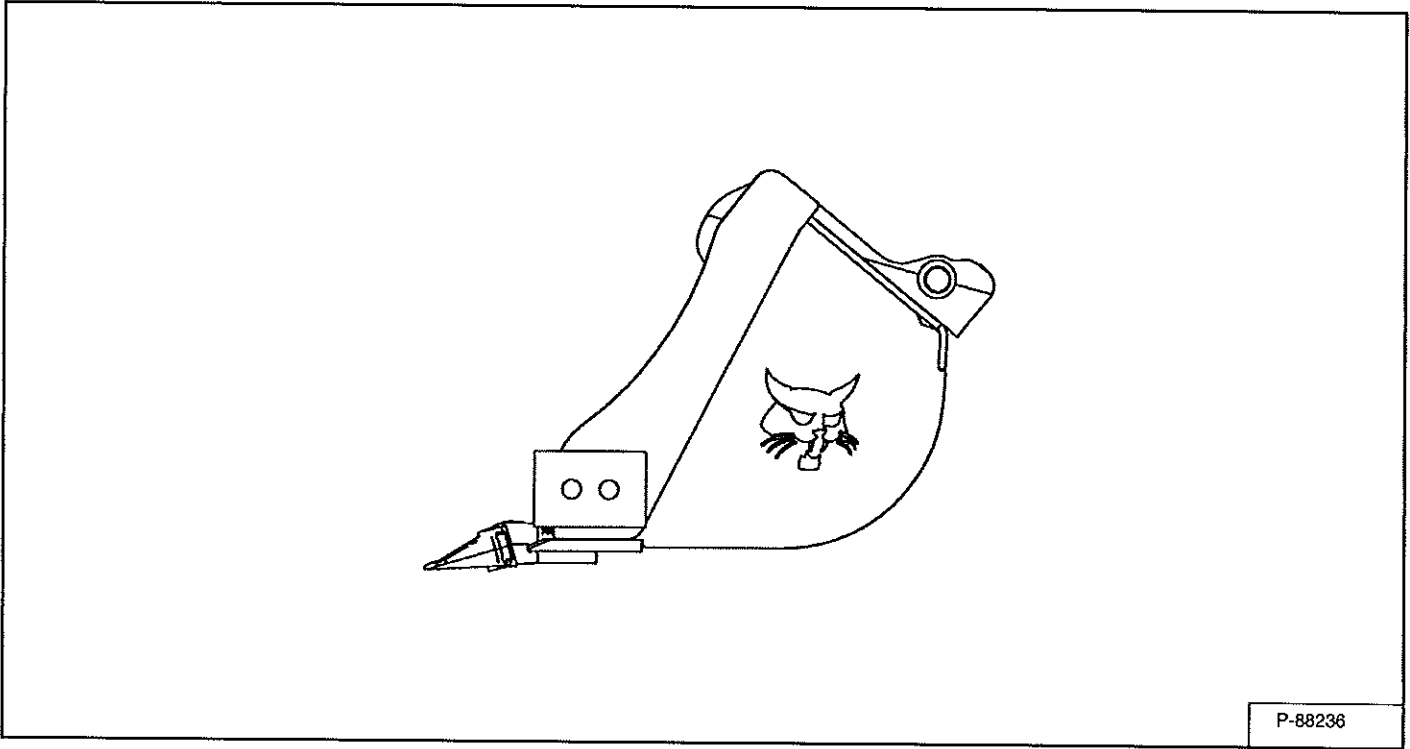
DESCRIPTION	8811 BACKHOE		
Operating Hydraulic Pressure	15857 kPa (158,59 bar) (2300 psi)		
Boom Relief Valve Setting: At Piston End of Cylinder At Rod End of Cylinder	16202 kPa (162,03 bar) (2350 psi) 21030 kPa (210,30 bar) (3050 psi)		
Dipper Relief Valve Setting: At Piston End of Cylinder At Rod End of Cylinder	21030 kPa (210,30 bar) (3050 psi) 19650 kPa (196,51 bar) (2850 psi)		
Swing Cylinder Relief Setting	15513 kPa (155,14 bar) (2250 psi)		
Maximum Flow Capacity	75,7 L/min (20 U.S. gpm)		
Digging Force Using Bucket Cylinder	2724 kg (6000 lb)		
Digging Force Using Arm Cylinder	1847 kg (4069 lb)		
Cylinders	Double acting		
	Bore Dia.	Rod Dia.	Stroke
Boom Cylinder	89 mm (3.50 in)	38 mm (1.50 in)	654 mm (25.7 in)
Arm Cylinder	89 mm (3.50 in)	44 mm (1.75 in)	654 mm (25.7 in)
Bucket Cylinder	76 mm (3.00 in)	51 mm (2.00 in)	586 mm (23.05 in)
Swing Cylinder	95 mm (3.75 in)	38 mm (1.50 in)	266 mm (10.47 in)
Stabilizer Cylinder	76 mm (3.00 in)	38 mm (1.50 in)	362 mm (14.25 in)
Fluid Lines	Standard SAE tubelines, hoses & fittings		
Valve	Four way, 3 position, 6 spool valve		

Capacities

DESCRIPTION	8811 BACKHOE			
	ARM LIFT (Boom Fully Raised)		BOOM LIFT (Arm Fully Extended)	
	Over End	Swing Arc	Over End	Swing Arc
+ 10 ft	464 kg (1022 lb)	464 kg (1022 lb)	491 kg (1082 lb)	491 kg (1082 lb)
+ 8 ft	399 kg (878 lb)	399 kg (878 lb)	502 kg (1105 lb)	502 kg (1105 lb)
+ 6 ft	412 kg (908 lb)	412 kg (908 lb)	488 kg (1074 lb)	488 kg (1074 lb)
+ 4 ft	560 kg (1234 lb)	560 kg (1234 lb)	467 kg (1029 lb)	467 kg (1029 lb)
+ 2 ft	N/A	N/A	419 kg (922 lb)	419 kg (922 lb)
Ground Level	N/A	N/A	426 kg (939 lb)	426 kg (939 lb)
- 2 ft	N/A	N/A	405 kg (893 lb)	405 kg (893 lb)
- 4 ft	N/A	N/A	388 kg (855 lb)	388 kg (855 lb)

(8811 BACKHOE) SPECIFICATIONS (CONT'D)

Bucket Specifications



P-88236

X-CHANGE BUCKET		
Bucket Size	Capacity SAE Heaped	Shipped Weight
330 mm (13 in) Trenching	0,042 cu m (1.5 cu ft)	67 kg (149 lb)
330 mm (13 in) HD Trenching	0,042 cu m (1.5 cu ft)	114 kg (252 lb)
406 mm (16 in) Trenching	0,056 cu m (2.0 cu ft)	76 kg (169 lb)
457 mm (18 in) Trenching	0,066 cu m (2.4 cu ft)	83 kg (183 lb)
457 mm (18 in) HD Trenching	0,064 cu m (2.3 cu ft)	120 kg (265 lb)
508 mm (20 in) Trenching	0,076 cu m (2.7 cu ft)	89 kg (196 lb)
610 mm (24 in) Trenching	0,096 cu m (3.4 cu ft)	100 kg (221 lb)
762 mm (30 in) Trenching	0,124 cu m (4.4 cu ft)	112 kg (248 lb)
914 mm (36 in) Trenching	0,156 cu m (5.5 cu ft)	128 kg (282 lb)
991 mm (39 in) Grading	0,130 cu m (4.6 cu ft)	125 kg (276 lb)

WARRANTY

WARRANTY101



Bobcat®

WARRANTY

Bobcat Attachments

Bobcat Company warrants to its authorized dealers and authorized dealers of Bobcat Equipment Ltd., who in turn warrant to the original owner, that each new Bobcat attachment will be free from proven defects in material and workmanship for twelve (12) months after delivery by the authorized Bobcat dealer to the original buyer.

During the warranty period, the authorized Bobcat dealer shall repair or replace, at Bobcat Company's option, without charge for parts and labor, any part of the Bobcat product which fails because of defects in material or workmanship. The owner shall provide the authorized Bobcat dealer with prompt written notice of the defect and allow reasonable time for replacement or repair. Bobcat Company may, at its option, require failed parts to be returned to the factory. Travel time of mechanics and transportation of the Bobcat product to the authorized Bobcat dealer for warranty work are the responsibility of the owner. The remedies provided in this warranty are exclusive.

This warranty does not cover replacement of scheduled service items and high wear items. The owner shall rely solely on the warranty, if any, of the respective manufacturers thereof. This warranty does not cover damages resulting from abuse, accidents, alterations, use of the Bobcat product as an attachment on any equipment not approved by Bobcat Company, air flow obstructions, or failure to maintain or use the Bobcat product according to the instructions applicable to it.

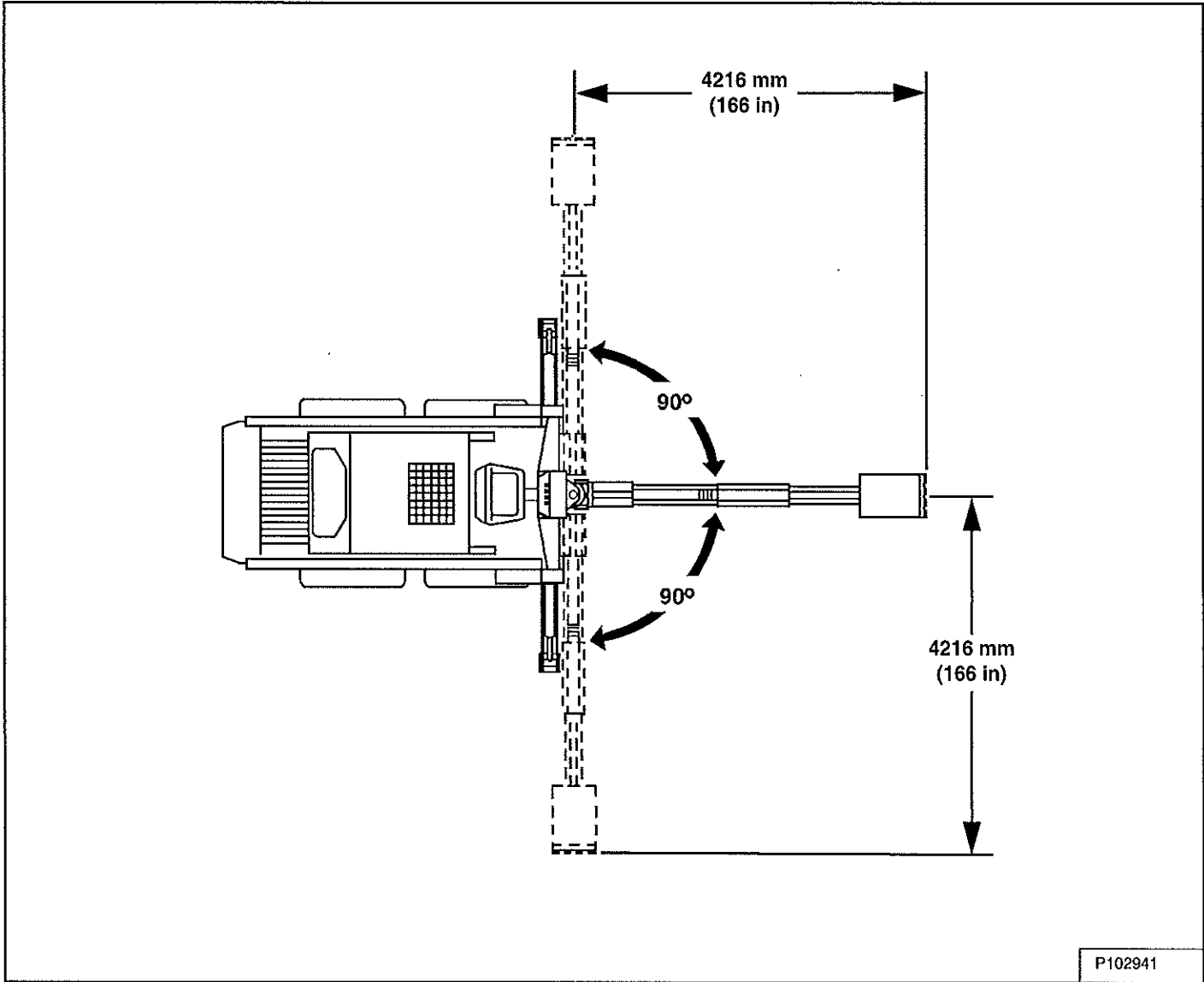
THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND CONDITIONS, EXCEPT THE WARRANTY OF TITLE. BOBCAT COMPANY DISCLAIMS ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL BOBCAT COMPANY OR THE AUTHORIZED BOBCAT DEALER BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, LOSS OR INTERRUPTION OF BUSINESS, LOST PROFITS, OR LOSS OF MACHINE USE, WHETHER BASED ON CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, STATUTE OR OTHERWISE, EVEN IF BOBCAT COMPANY OR THE AUTHORIZED BOBCAT DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE TOTAL LIABILITY OF BOBCAT COMPANY AND THE AUTHORIZED BOBCAT DEALERS WITH RESPECT TO THE PRODUCT AND SERVICES FURNISHED HEREUNDER SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCT UPON WHICH SUCH LIABILITY IS BASED.



Bobcat®

(8811 BACKHOE) SPECIFICATIONS (CONT'D)

Performance



DESCRIPTION	8811 BACKHOE
Backhoe Weight (W/O Bucket)	913 kg (2012 lb)
Swing Pivot to Front Wheels	1014 mm (39.9 in)
Stabilizer Spread (Transport)	1786 mm (70.3 in)
Stabilizer Spread (Operating)	3310 mm (130.3 in)
Ground Clearance	104 mm (4.1 in)
Bucket Rotating	200°
Swing Arc	180°
Leveling Angle	11.7°
Angle of Approach	12.3°

INSTALLATION INSTRUCTIONS

INSTRUCTION: 6987315	1
ESTIMATED INSTALLATION TIME: 15 Min.*	1
(Kit #7168932) Backhoe Adapter Kit	11



Bobcat®



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INSTALLATION INSTRUCTION

Instruction: 6987315
 Product: BOBCAT ATTACHMENT
 Subject: 8811 BACKHOE BOB-TACH™
 ADAPTER KIT

Installing Backhoe Adapter to Bob-Tach (Hand Lever Bob-Tach)

Kit Number	7168932
------------	---------

MODEL	SERIAL NUMBER
8811	630100101 & Above A55800101 & Above

NOTE: The chart below lists approved Bobcat loaders requiring the adapter kit when installing the 8811 backhoe. (See your Bobcat dealer for an updated list of approved loaders and available kits.)

LOADER MODEL	
A770	T630
S630	T650
S650	T750
S750	T770
S770	T870
S850	

NOTE: Additional kits may be required for proper operation of the 8811 backhoe. See your Bobcat dealer for available kits.

NOTE: These installation instructions are included in the 8811 Backhoe Operation & Maintenance manual for future reference.

ESTIMATED INSTALLATION TIME: 15 MIN*
 * Approximate time only; actual time may vary.

Read this instruction completely to become familiar with the procedures before beginning the installation.

To avoid duplication, instructions may refer you to the Operation & Maintenance Manual or the Service Manual for more detailed instructions.

WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause serious injury or death.

W-2744-0608

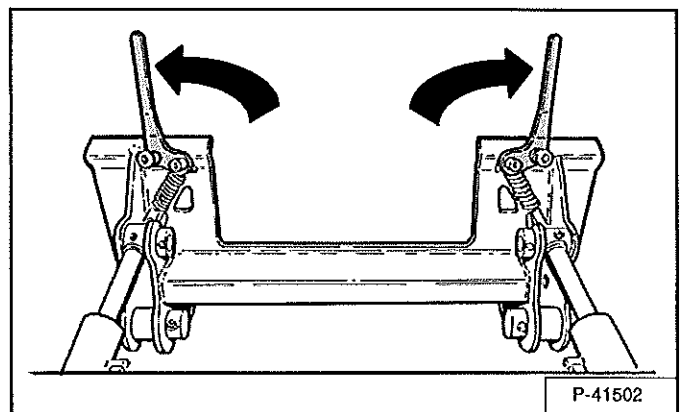
Always inspect the loader's Bob-Tach and the backhoe adapter mounting frame before installation. See the Daily Inspection section in the loader's Operation & Maintenance Manual.

WARNING

Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

W-2054-1285

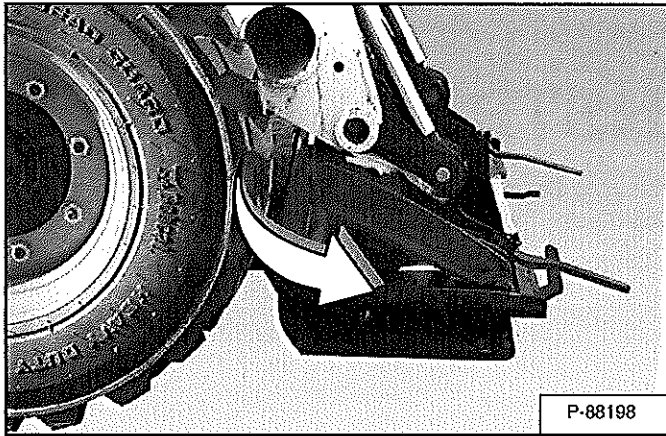
Figure 1



Pull the Bob-Tach levers up until they are fully raised (wedges fully raised) [Figure 1].

Enter the loader, start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Figure 2

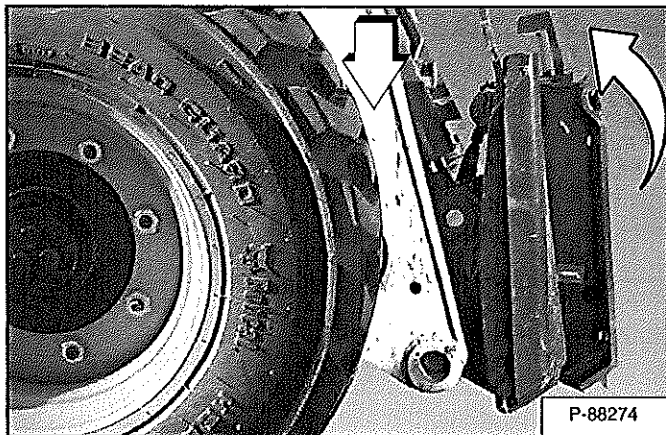


Lower the lift arms and tilt the Bob-Tach forward.

Drive the loader slowly forward until the top edge of the Bob-Tach is completely under the top flange of the backhoe adapter mounting frame [Figure 2].

NOTE: Be sure the Bob-Tach levers do not hit the backhoe adapter.

Figure 3



Tilt the Bob-Tach backward until the backhoe adapter is vertical and fully lower the lift arms [Figure 3]. This will cause the backhoe adapter mounting frame to fit up against the front of the loader Bob-Tach.

Stop the engine and exit the loader.

WARNING

AVOID INJURY OR DEATH

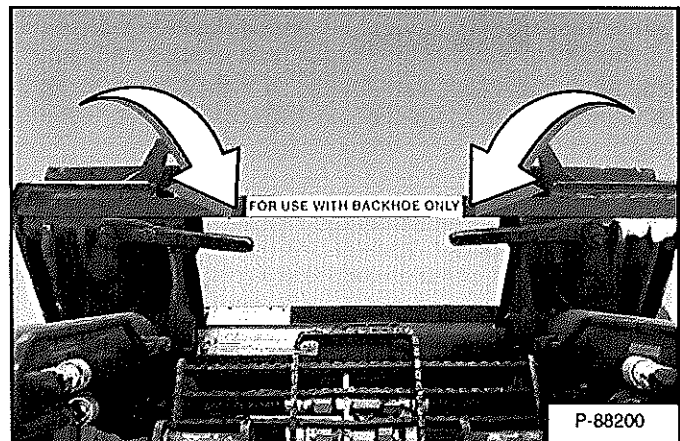
Before you leave the operator's seat:

- Lower the lift arms and put the attachment flat on the ground.
- Stop the engine.
- Engage the parking brake.
- Raise the seat bar.
- Move all controls to the **NEUTRAL / LOCKED** position to make sure the lift, tilt and traction drive functions are deactivated.

The seat bar system must deactivate these functions when the seat bar is up. See your Bobcat dealer for service if controls do not deactivate.

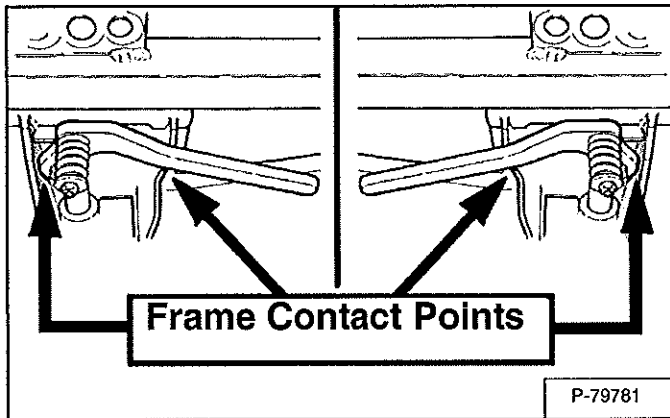
W-2463-1110

Figure 4



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 4] (wedges fully extended through the backhoe adapter mounting frame holes).

Figure 5



Both levers must contact the frame as shown when locked [Figure 5].

If both levers do not engage in the locked position, see your Bobcat dealer for maintenance.

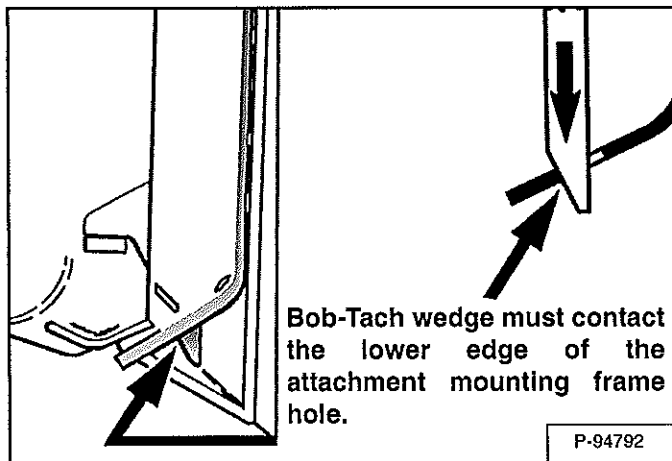
WARNING

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 6



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

(Installing Backhoe Adapter to Bob-Tach (Power Bob-Tach))

! WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause serious injury or death.

W-2744-0608

This machine may be equipped with a Power Bob-Tach.

Always inspect the loader's Bob-Tach and the backhoe adapter mounting frame before installation. See the Daily Inspection section in the loader's Operation & Maintenance Manual.

Enter the loader, start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Figure 7

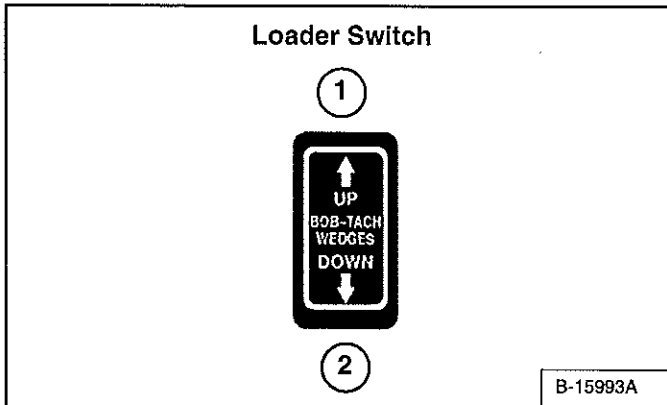
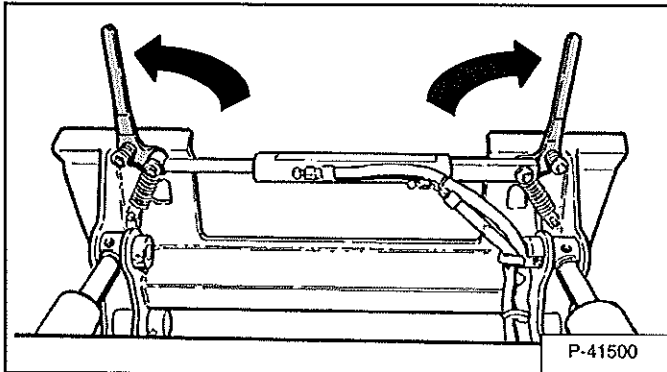
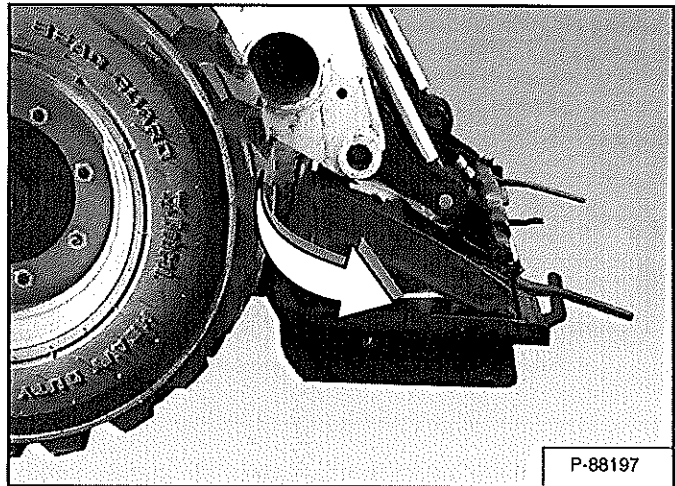


Figure 8



Push and hold the BOB-TACH "WEDGES UP" switch (Item 1) [Figure 7] until the levers are fully raised (wedges fully raised) [Figure 8].

Figure 9

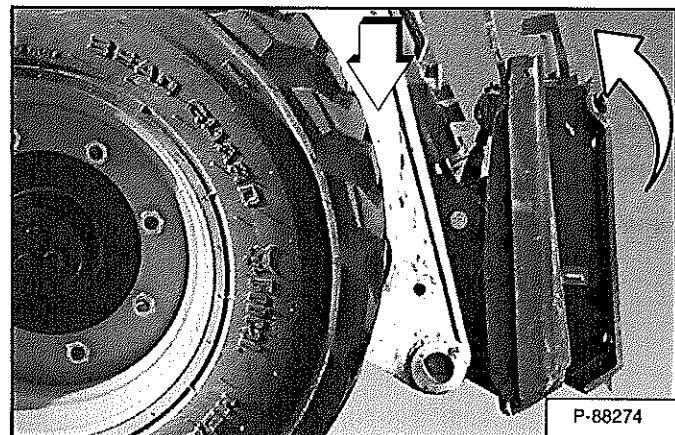


Lower the lift arms and tilt the Bob-Tach forward.

Drive the loader slowly forward until the top edge of the Bob-Tach is completely under the top flange of the backhoe adapter mounting frame [Figure 9].

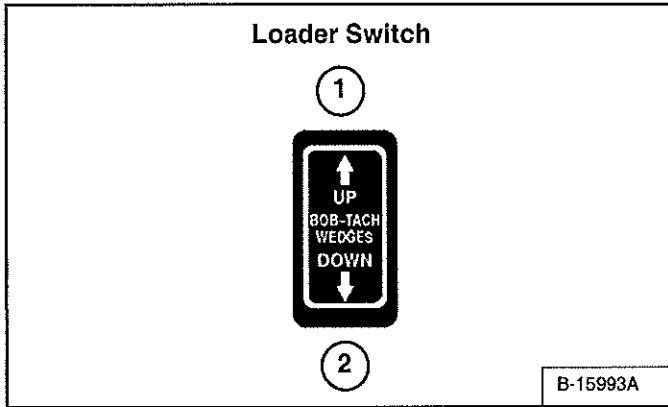
NOTE: Be sure the Bob-Tach levers do not hit the backhoe adapter.

Figure 10



Tilt the Bob-Tach backward until the backhoe adapter is vertical and fully lower the lift arms [Figure 10]. This will cause the backhoe adapter mounting frame to fit up against the front of the loader Bob-Tach.

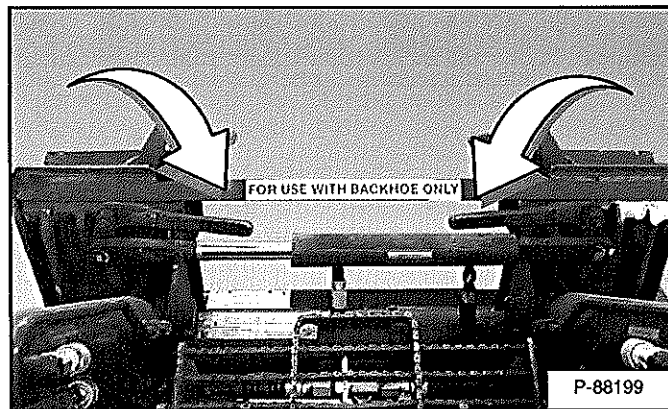
Figure 11



NOTE: The Power Bob-Tach system has continuous pressurized hydraulic oil to keep the wedges in the engaged position and prevent attachment disengagement. Because the wedges can slowly lower, the operator may need to reactivate the switch (BOB-TACH "WEDGES UP") to be sure both wedges are fully raised before installing the attachment.

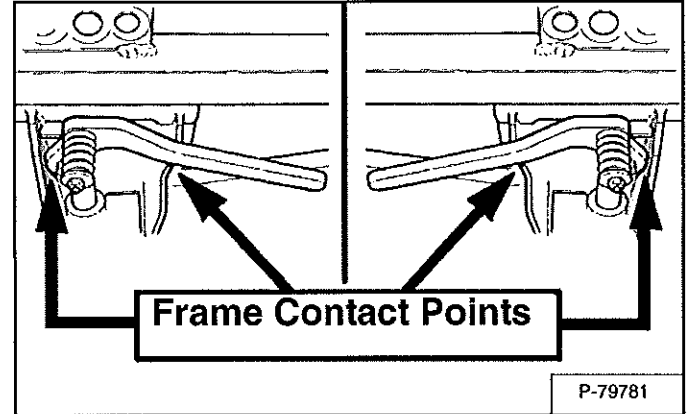
Push and hold the BOB-TACH "WEDGES UP" switch (Item 1) [Figure 11] until the levers are fully raised (wedges fully raised).

Figure 12



Push and hold the BOB-TACH "WEDGES DOWN" switch (Item 2) [Figure 11] until the levers are fully engaged in the locked position [Figure 12] (wedges fully extended through the backhoe adapter mounting frame holes).

Figure 13



Both levers must contact the frame as shown when locked [Figure 13].

If both levers do not engage in the locked position, see your Bobcat dealer for maintenance.

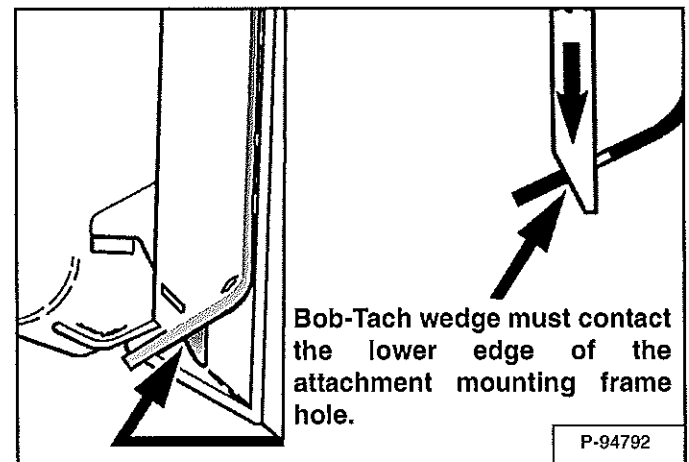
! WARNING

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 14



The wedges must extend through the holes in the backhoe adapter mounting frame, securely fastening the backhoe adapter to the loader Bob-Tach [Figure 14].

Fully lower the lift arms.

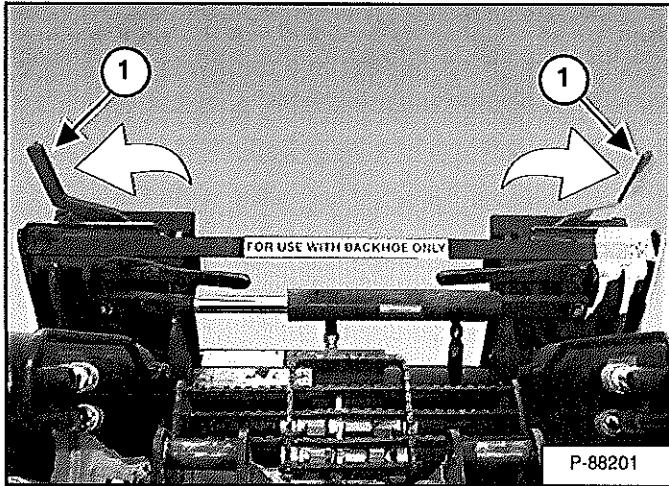
⚠ WARNING

Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

W-2054-1285

Always inspect the Bob-Tach, backhoe adapter and backhoe mounting frame before installation.

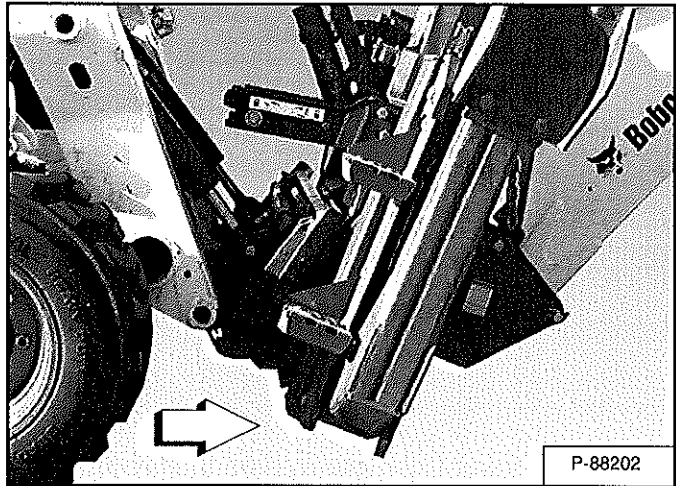
Figure 15



Pull the red backhoe adapter hand levers (Item 1) [Figure 15] all the way up.

Enter the loader, start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Figure 16

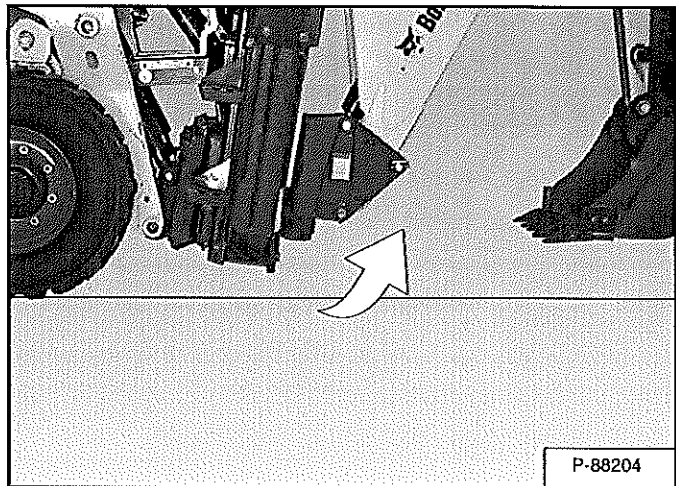


Tilt the Bob-Tach / backhoe adapter forward slightly.

Drive the loader forward until the top edge of the backhoe adapter is completely under the top flange of the backhoe mounting frame [Figure 16].

Be sure the backhoe adapter hand levers do not hit the backhoe.

Figure 17



Tilt the Bob-Tach / backhoe adapter backward until the backhoe is slightly off of the ground [Figure 17]. This will cause the backhoe mounting frame to fit up against the front of the backhoe adapter.

Stop the engine, engage the parking brake and exit the loader.

! WARNING

Before you leave the operator's position:

- Lower the lift arm(s) fully.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

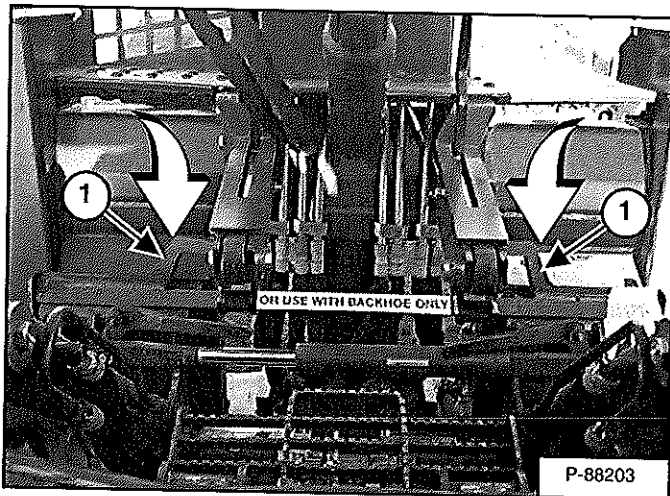
W-2500-0404

! WARNING

Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

W-2054-1285

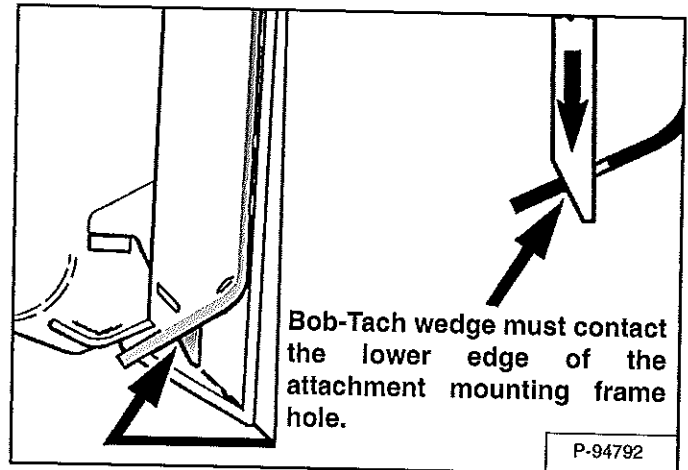
Figure 18



Push down on the red backhoe adapter hand levers (Item 1) [Figure 18] until they are fully engaged in the locked position.

If both levers do not engage in the locked position, see your Bobcat dealer for maintenance.

Figure 19



The wedges must extend through the holes in the backhoe mounting frame, securely fastening the backhoe to the backhoe adapter [Figure 19].

Lower the lift arms and put the backhoe flat on the ground.

! 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

To complete the attachment of the 8811 backhoe to the loader:

- Lock the frame of the backhoe to the loader using the backhoe mounting arms.
- Tighten and fasten the safety chain around the Loader Bob-Tach and the backhoe mounting frame.
- Connect the hydraulic quick couplers.

NOTE: Refer to the 8811 Backhoe Operation & Maintenance Manual for the correct procedures.

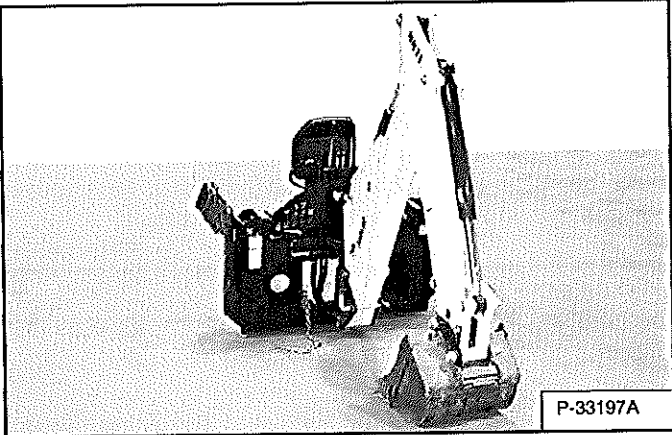
Removing 8811 Backhoe From Backhoe Adapter

To prepare the backhoe for removal from the backhoe adapter:

- Raise the backhoe stabilizers and install the stabilizer locks.
- Raise the backhoe stabilizers and install the stabilizer locks.
- Raise the boom and install the boom transport lock pin.
- Disconnect the safety chain.
- Disconnect the hydraulic quick couplers.
- Release the backhoe frame lock levers to release the backhoe from the loader.

NOTE: Refer to the 8811 Backhoe Operation & Maintenance Manual for the correct procedures.

Figure 20



Always position the backhoe on a level surface, with the boom transport lock pin installed when removing the backhoe [Figure 20].

Enter the loader, start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Lower the lift arms while tilting the Bob-Tach / backhoe adapter forward and set the backhoe frame and bucket on the ground.

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.

Stop the engine and exit the loader.



AVOID INJURY OR DEATH

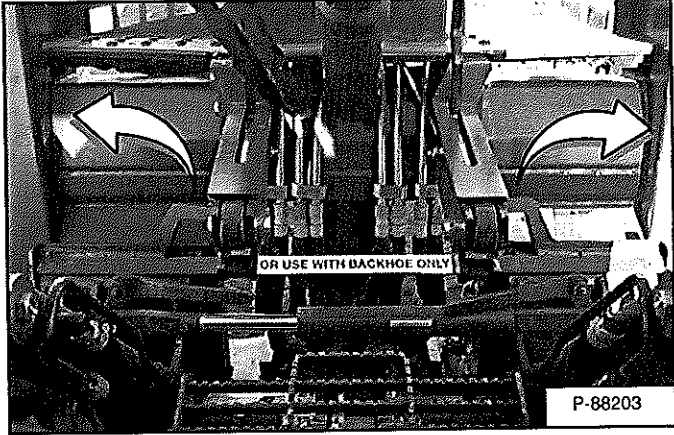
Before you leave the operator's position:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2722-0208

Figure 21



Pull the red backhoe adapter hand levers up [Figure 21] until they are fully raised (wedges fully raised).

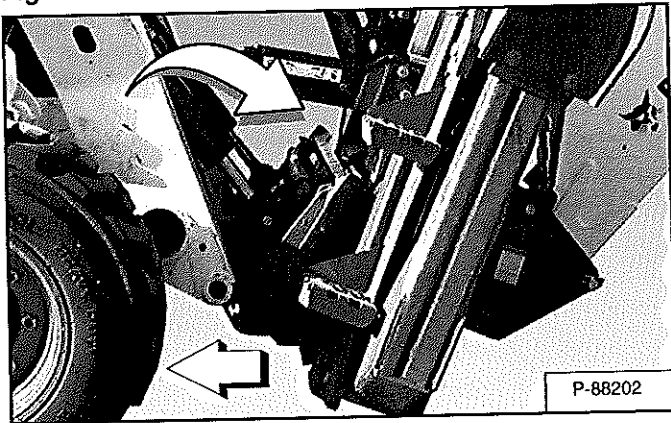


Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

W-2054-1285

Enter the loader, start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Figure 22



Tilt the Bob-Tach / backhoe adapter forward, lower the lift arms and move backward from the backhoe mounting frame [Figure 22].

NOTE: Do not leave the backhoe adapter attached to the 8811 backhoe or loader when removing to install another attachment.

Removing Backhoe Adapter from Bob-Tach (Hand Lever Bob-Tach)

Fully lower the lift arms.

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.

Stop the engine and exit the loader.



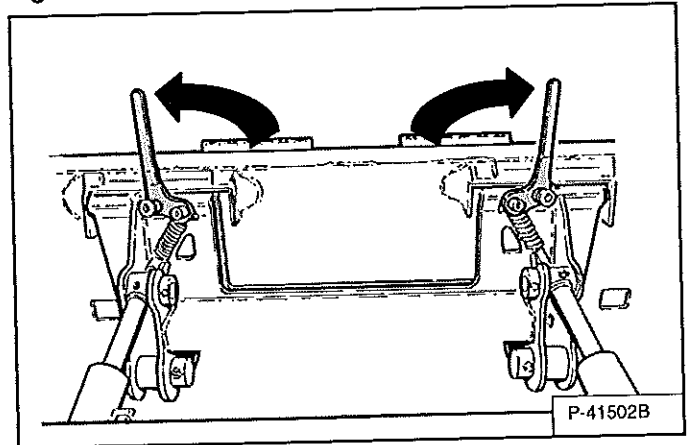
Before you leave the operator's position:

- Lower the lift arm(s) fully.
- Stop the engine and engage the parking brake.
- Move all pedals, handles, joysticks, and other controls until they are LOCKED or in the NEUTRAL position.

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2500-0404

Figure 23



Pull the Bob-Tach levers up [Figure 23] until they are fully raised (wedges fully raised).



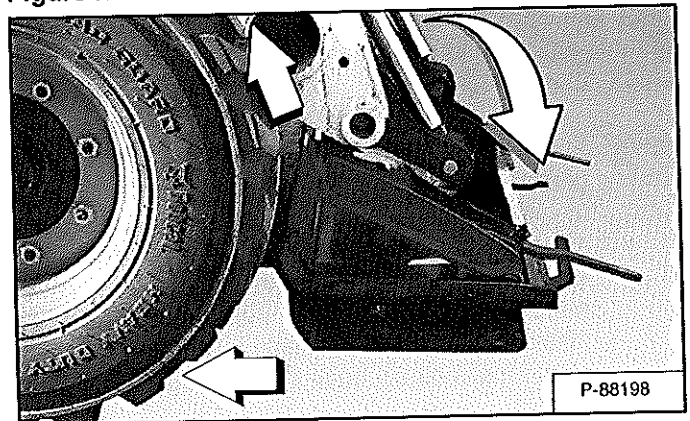
Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

W-2054-1285

Enter the loader, start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Tilt the Bob-Tach forward until the backhoe adapter is flat on the ground.

Figure 24



Continue to tilt the Bob-Tach forward and raise the lift arms until the bottom of the Bob-Tach is out of the backhoe adapter frame [Figure 24].

Move the loader backward away from the backhoe adapter.

Lower the lift arms and tilt the Bob-Tach backward.

Removing Backhoe Adapter from Bob-Tach (Power Bob-Tach)

Fully lower the lift arms.

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.

Figure 25

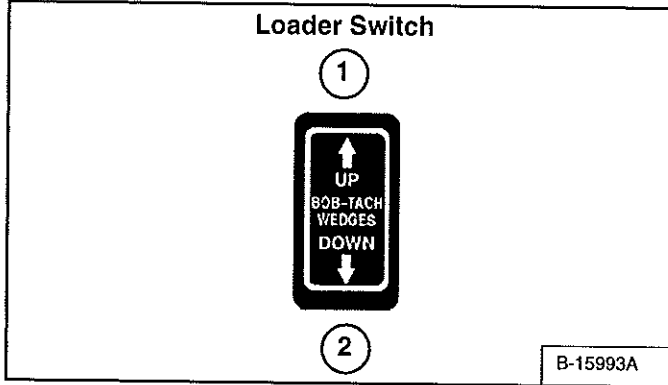
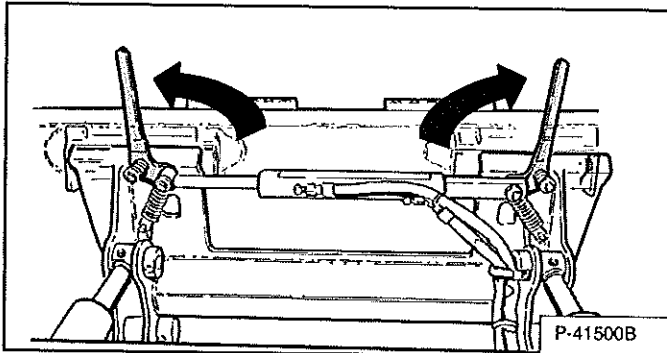


Figure 26

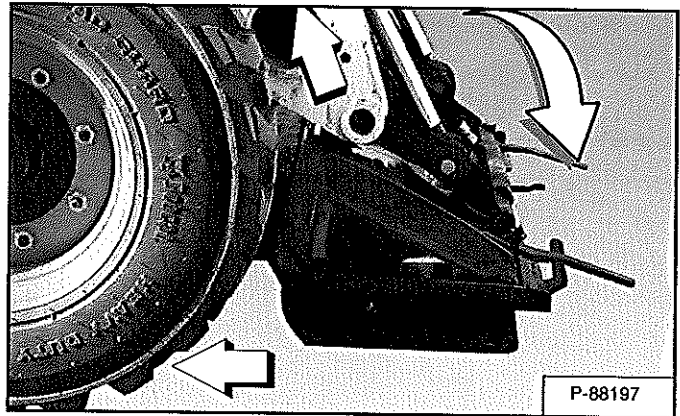


Push and hold the BOB-TACH "WEDGES UP" switch (Item 1) [Figure 25] until the levers [Figure 26] are fully raised (wedges fully raised).

NOTE: The Power Bob-Tach system has continuous pressurized hydraulic oil to keep the wedges in the engaged position and prevent attachment disengagement. Because the wedges can slowly lower, the operator may need to reactivate the switch (BOB-TACH "WEDGES UP") when removing an attachment to be sure both wedges are fully raised.

Tilt the Bob-Tach forward until the backhoe adapter is flat on the ground.

Figure 27

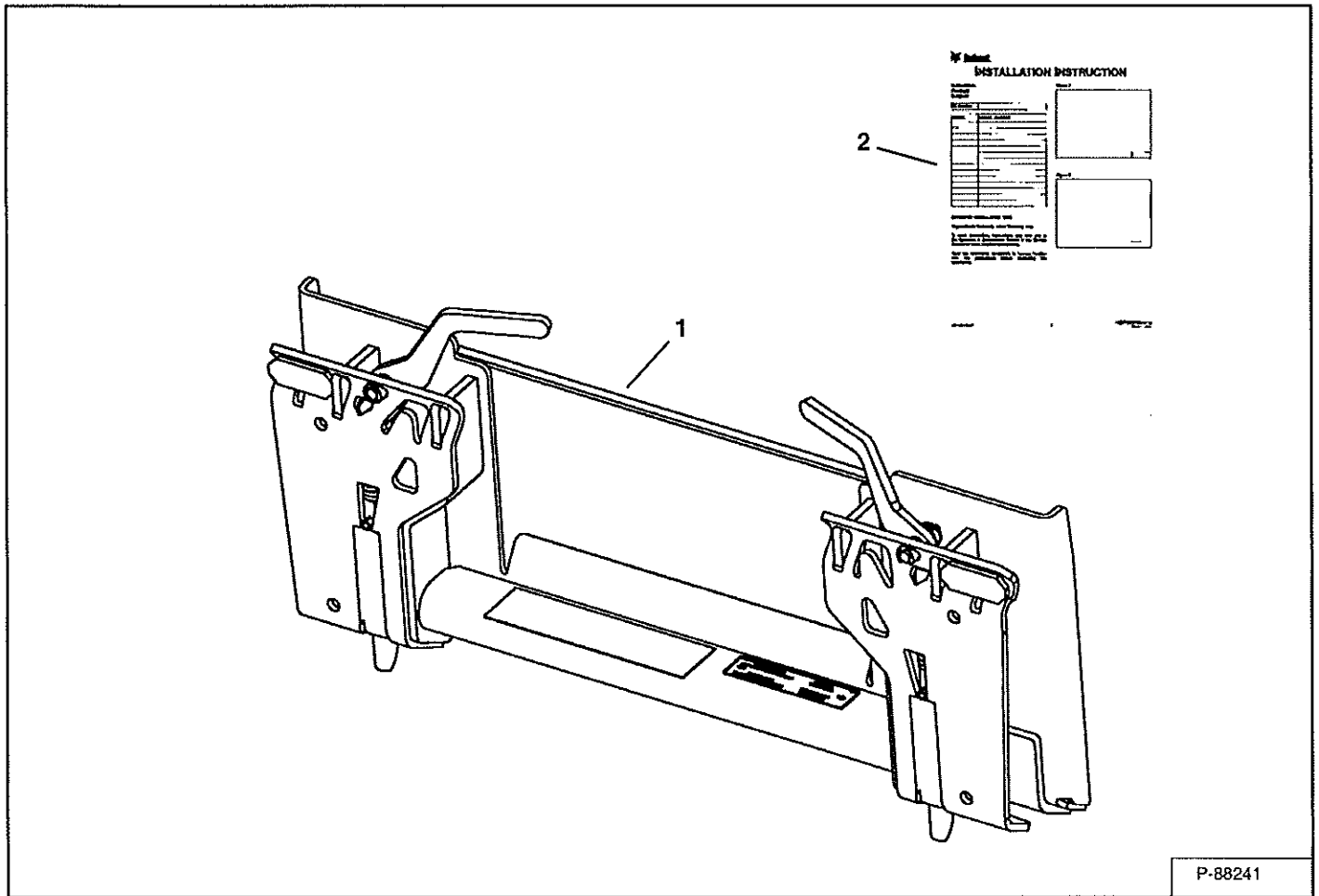


Continue to tilt the Bob-Tach forward and raise the lift arms until the bottom of the Bob-Tach is out of the backhoe adapter frame [Figure 27].

Move the loader backward away from the backhoe adapter.

Lower the lift arms and tilt the Bob-Tach backward.

CUSTOMER PACKING LIST



P-88241

(Kit #7168932) Backhoe Adapter Kit

REF.	PART NO.	DESCRIPTION	QTY.
1	7155536	BACKHOE ADAPTER	1
2	6987315	INSTRUCTION	1

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