



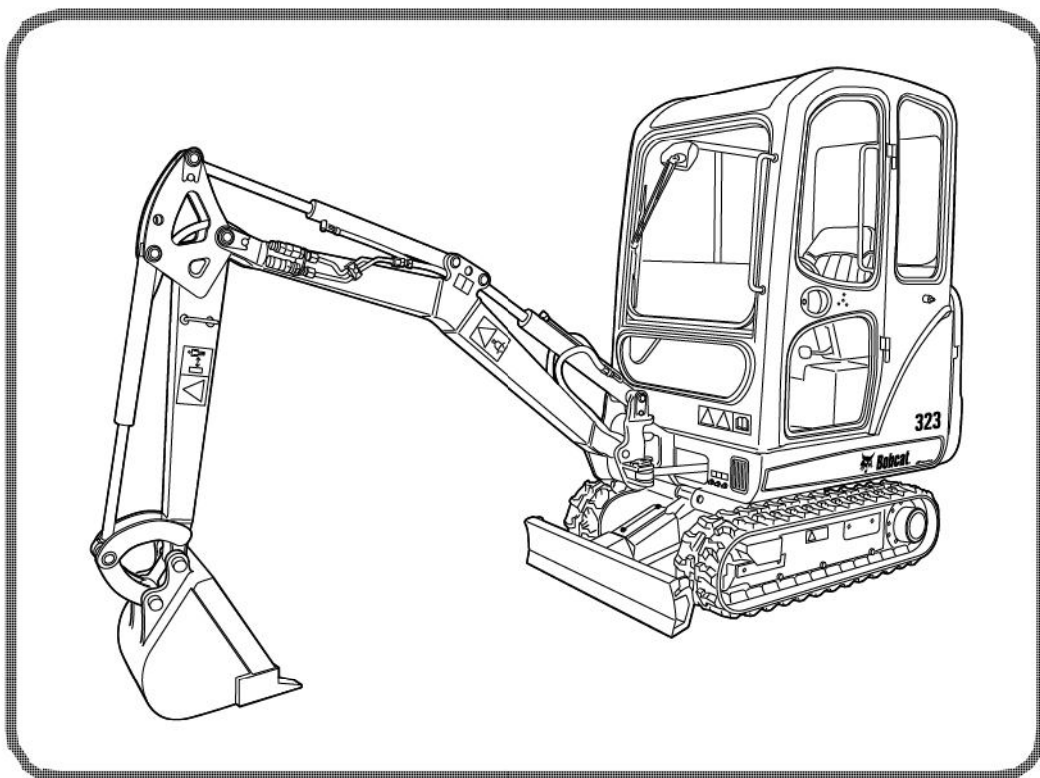
Bobcat®

Service Manual

321-323 Compact Excavator

321 - S/N A76511001 & Above

323 - S/N A01711001 & Above



Bobcat®

Printed in Belgium



Dealer Copy -- Not for Resale

MAINTENANCE SAFETY



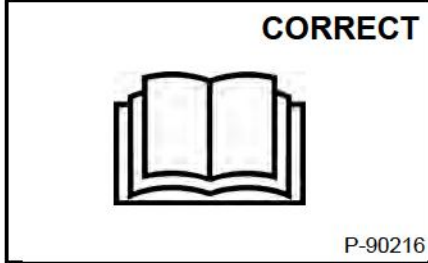
WARNING

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

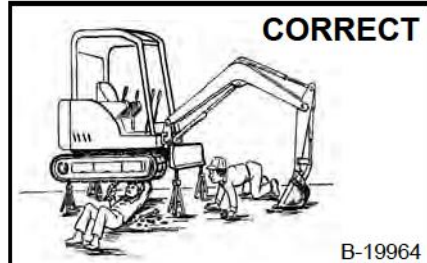
W-2003-0807



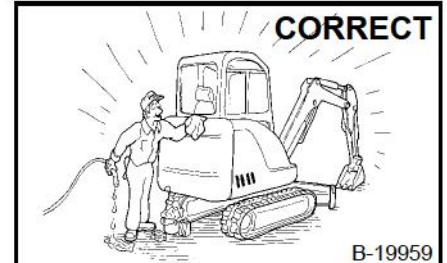
Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



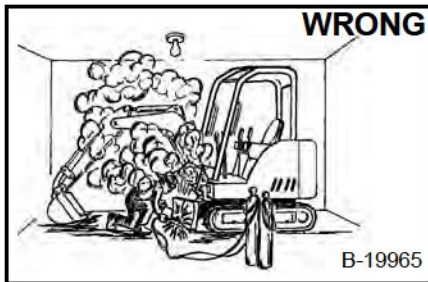
⚠ Never service the Bobcat Excavator without instructions.



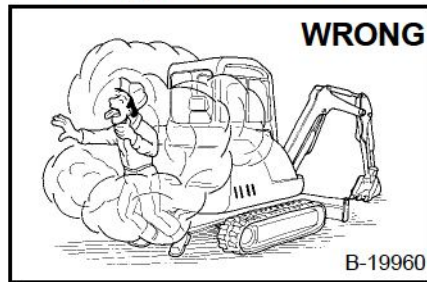
⚠ Use the correct procedure to lift and support the excavator.



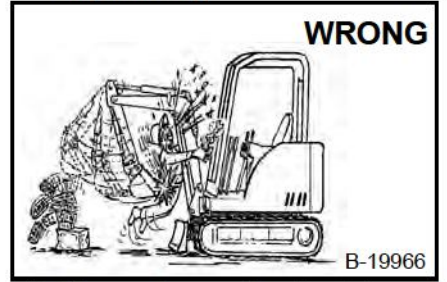
⚠ Cleaning and maintenance are required daily.



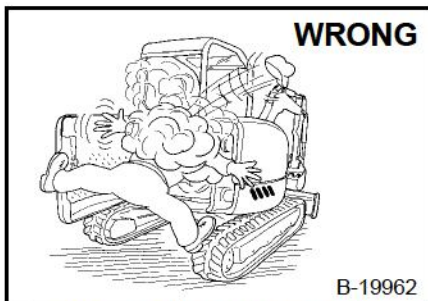
⚠ Have good ventilation when welding or grinding painted parts.
⚠ Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.



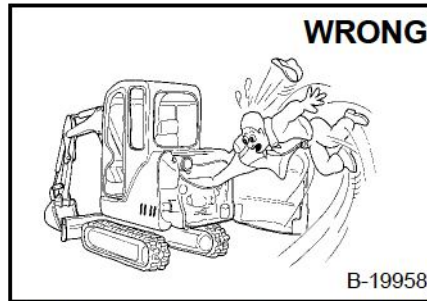
⚠ Vent exhaust to outside when engine must be run for service.
⚠ Exhaust system must be tightly sealed. Exhaust fumes can kill without warning.



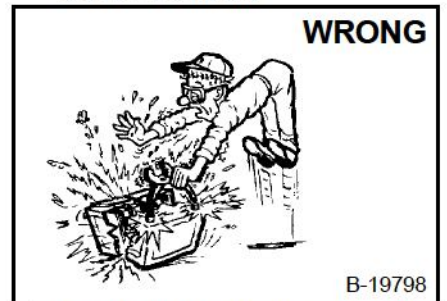
⚠ Always lower the bucket and blade to the ground before doing any maintenance.
⚠ Never modify equipment or add attachments not approved by Bobcat Company.



⚠ Stop, cool and clean engine of flammable materials before checking fluids.
⚠ Never service or adjust machine with the engine running unless instructed to do so in the manual.
⚠ Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate the skin or eyes.
⚠ Never fill fuel tank with engine running, while smoking, or when near open flame.



⚠ Keep body, jewelry and clothing away from moving parts, electrical contact, hot parts and exhaust.
⚠ Wear eye protection to guard from battery acid, compressed springs, fluids under pressure and flying debris when engines are running or tools are used. Use eye protections approved for type of welding.
⚠ Keep tailgate closed except for service. Close and latch tailgate before operating the excavator.



⚠ Lead-acid batteries produce flammable and explosive gases.
⚠ Keep arcs, sparks, flames and lighted tobacco away from batteries.
⚠ Batteries contain acid which burns eyes or skin on contact.
⚠ Wear protective clothing. If acid contacts body, flush well with water. For eye contact flush well and get immediate medical attention.

Maintenance procedures which are given in the Operation & Maintenance Manual can be performed by the owner/operator without any specific technical training. Maintenance procedures which are not in the Operation & Maintenance Manual must be performed **ONLY BY QUALIFIED BOBCAT SERVICE PERSONNEL**. Always use genuine Bobcat replacement parts. The Service Safety Training Course is available from your Bobcat dealer.

MSW28-0409

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**SAFETY AND
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**UNDER-
CARRIAGE**

**UPPER-
STRUCTURE &
SWING SECTION**

**ELECTRICAL
SYSTEM AND
ANALYSIS**

**ENGINE
SERVICE**

HEATER

SPECIFICATIONS

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Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.


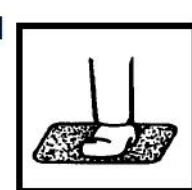

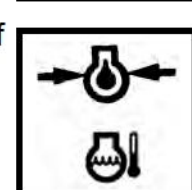

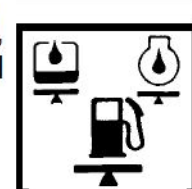

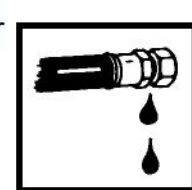



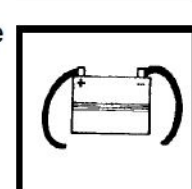

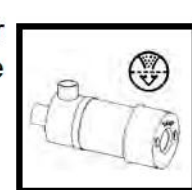
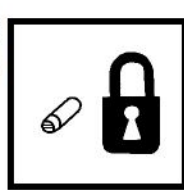
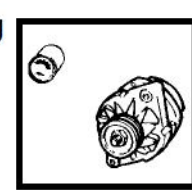
The full manual is available for immediate download.

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FOREWORD

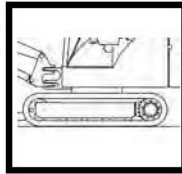
This manual is for the Bobcat excavator mechanic. It provides necessary servicing and adjustment procedures for the Bobcat excavator and its component parts and systems. Refer to the Operation & Maintenance Manual for operating instructions, starting procedure, daily checks, etc.

A general inspection of the following items must be made after the excavator has had service or repair:

- | | | | |
|---|---|--|---|
| 1. Check that the ROPS/TOPS/FOPS is in good condition and is not modified. |  | 9. Safety treads must be in good condition. |  |
| 2. Check that ROPS/TOPS mounting hardware is tightened and is Bobcat approved. |  | 10. Check for correct function of indicator lamps. |  |
| 3. The seat belt must be correctly installed, functional and in good condition. |  | 11. Check hydraulic fluid level, engine oil level and fuel supply. |  |
| 4. Machine signs (decals) must be legible and in the correct location. |  | 12. Inspect for fuel, oil or hydraulic fluid leaks. |  |
| 5. Travel levers, control levers and foot pedals must return to neutral. Check that the pedal locks are in working order. |  | 13. Lubricate the excavator. |  |
| 6. Check for correct function of the work lights. |  | 14. Check the condition of the battery and cables. |  |
| 7. Enclosure door latches must open and close freely. |  | 15. Inspect the air cleaner for damage or leaks. Check the condition of the element. |  |
| 8. Attachment locking pins must function correctly and be in good condition. |  | 16. Check the electrical charging system. |  |

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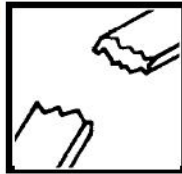
20. Check tracks for wear and tension. Use only approved tracks.



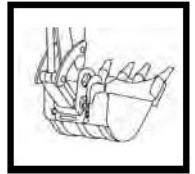
24. Check the control console interlocks for correct function.



21. Inspect for loose or broken parts or connections.



25. Inspect the X-Change for wear or damage. Repair or replace damaged parts.



22. Check for any field modification not completed.



26. Check function or condition of all equipped options and accessories (examples: special applications kit, motion alarm, etc.).



23. Operate the machine and check all functions.



27. Recommend to the owner that all necessary corrections be made before the machine is returned to service.



FW EXC-0308 SM

SAFETY INSTRUCTIONS

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



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

W-2003-0807



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

I-2019-0284



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



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 following publications provide information on the safe use and maintenance of the Bobcat machine and attachments:

- The Delivery Report is used to assure that complete instructions have been given to the new owner and that the machine is in safe operating condition.

- The Operation & Maintenance Manual delivered with the machine or attachment contains operating information as well as routine maintenance and service procedures. It is a part of the machine and can be stored in a container provided on the machine. Replacement Operation & Maintenance Manuals can be ordered from your Bobcat dealer.
- Machine signs (decals) instruct on the safe operation and care of your Bobcat machine or attachment. The signs and their locations are shown in the Operation & Maintenance Manual. Replacement signs are available from your Bobcat dealer.
- An Operator's Handbook fastened to the operator cab. It's brief instructions are convenient to the operator. The handbook is available from your dealer in an English edition or one of many other languages. See your Bobcat dealer for more information on translated versions.
- The AEM Safety Manual delivered with the machine gives general safety information.
- The Service Manual and Parts Manual are available from your dealer for use by mechanics to do shop-type service and repair work.
- The Compact Excavator Operator Training Course is available through your local dealer or at www.training.bobcat.com or www.bobcat.com. This course is intended to provide rules and practices of correct operation of the Bobcat excavator. The course is available in English and Spanish versions.
- Service Safety Training Courses are available from your Bobcat dealer or at www.training.bobcat.com or www.bobcat.com. They provide information for safe and correct service procedures.
- The Bobcat compact excavator Safety Video is available from your Bobcat dealer or at www.training.bobcat.com or www.bobcat.com.

SI EXC EMEA-0409 SM

SAFETY INSTRUCTIONS (CONT'D)

The dealer and owner / operator review the recommended uses of the product when delivered. If the owner / operator will be using the machine for a different application(s) he or she must ask the dealer for recommendations on the new use.



Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica dust. Use a respirator, water spray or other means to control dust.

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 coolants 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.

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FIRE PREVENTION (CONT'D)

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 Arrestor Exhaust System

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

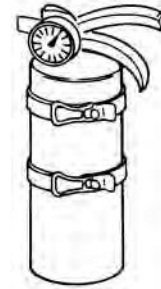
Welding And Grinding

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.

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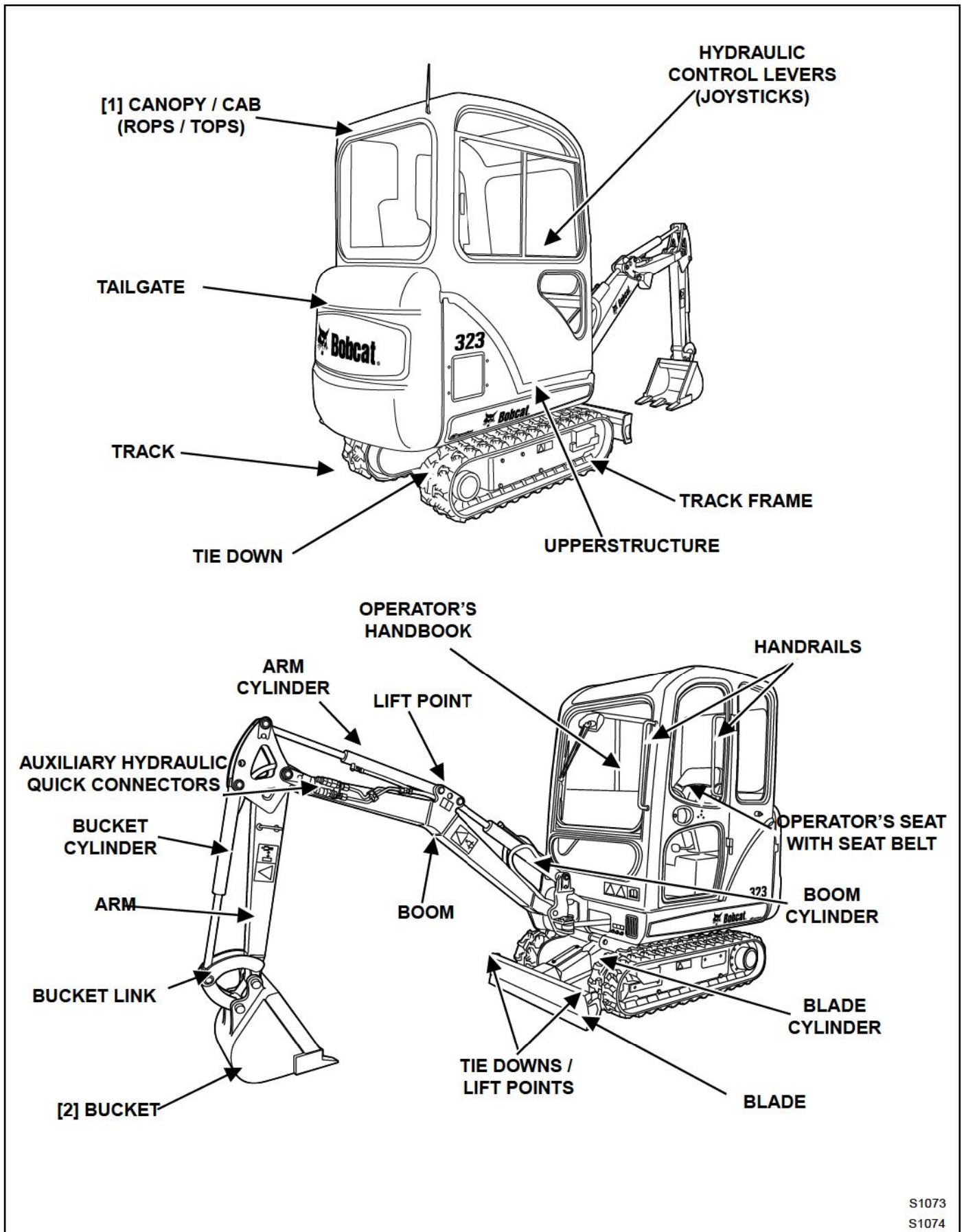
DELIVERY REPORT

Figure 3

The diagram shows a form titled "DELIVERY REPORT". The form is divided into several sections. At the top right, the title "DELIVERY REPORT" is printed. Below the title, there are several horizontal lines representing text input fields. To the left of these fields, there is a section with a dark header containing the word "WARNING" in white capital letters. Below the "WARNING" section, there are more horizontal lines. At the bottom right of the form, there is a small rectangular box containing the alphanumeric code "B-16315".

The Delivery Report items must be explained to the owner / operator by the dealer. The dealer is to complete the form and the owner / operator signs the form to indicate his understanding **[Figure 3]**.

BOBCAT EXCAVATOR IDENTIFICATION



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S1073
S1074

[1] ROPS, TOPS - (Roll Over Protective Structure - Tip Over Protective Structure) as standard equipment. The ROPS / TOPS meets ISO 3471 and ISO 12117. FOGS (Falling Object Guards) is available from your Bobcat Excavator dealer.
[2] BUCKET - Several different buckets and other attachments are available from the Bobcat Loader.

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LIFTING AND BLOCKING THE EXCAVATOR

Procedure

Always park the machine on a level surface.

Figure 10-10-1



Raise one side of the machine (approximately 4 inches) using the boom and arm as shown in [Figure 10-10-1].

Raise the blade fully and install jackstands under the blade and the track frame. Lower the machine until all machine weight is on the jackstands.

Stop the engine.

WARNING

Put jackstands under the blade and rear corners of the undercarriage before working under the machine. Failure to block up the machine may allow it to move or fall and result in injury or death.

W-2218-1195

WARNING

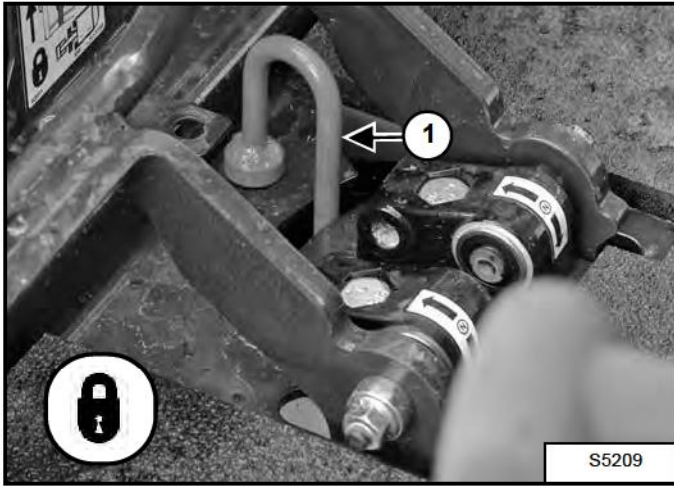
AVOID INJURY

Keep fingers and hands out of pinch points when checking the track tension.

W-2142-0903

UPPERSTRUCTURE SLEW LOCK

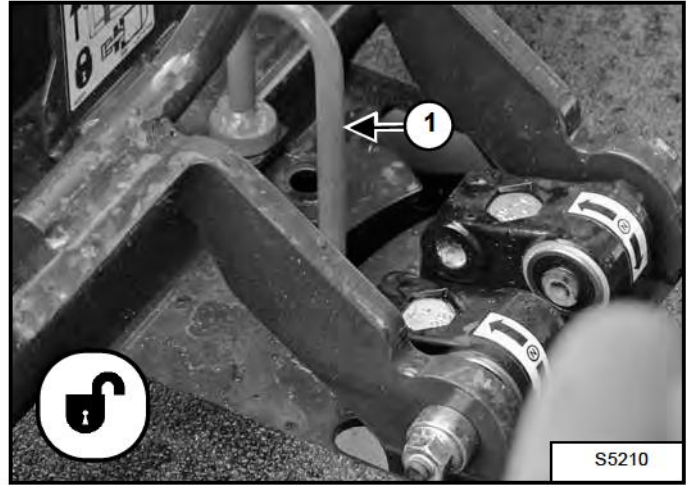
Figure 10-11-1



Move the lever (Item 1) [Figure 10-11-1] to the right and down to engage the Upperstructure Slew Lock. Fit the lever properly to fully engage the Slew Lock. When the Slew Lock is engaged (locked), the upperstructure of the excavator is locked to the track frame and will not rotate.

NOTE: The upperstructure must be in the straight forward or straight backward position for the upperstructure to lock.

Figure 10-11-2



Move the lever (Item 1) [Figure 10-11-2] up and to the left to disengage the upperstructure from the track frame. Fit the lever properly to fully disengage the Slew Lock.



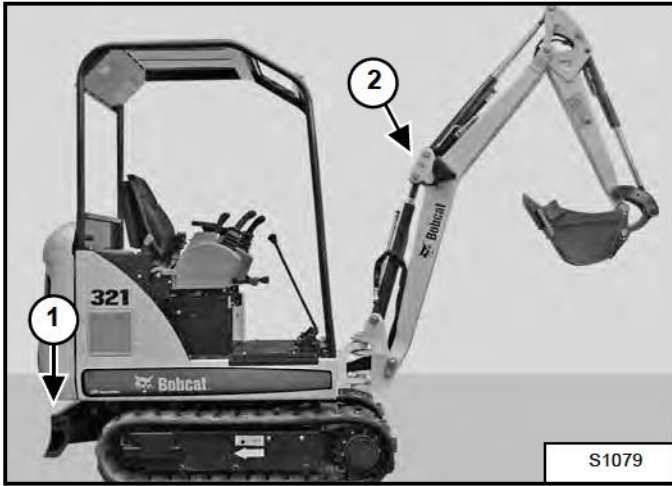
AVOID INJURY

The upperstructure slew lock lever must be engaged when transporting the machine.

W-2197-0904

LIFTING THE EXCAVATOR

Figure 10-12-1



Fully extend the cylinders of the bucket, arm, and boom, and rotate the upperstructure, so that the excavator is in the position as shown [Figure 10-12-1].

Engage the upperstructure slew lock (See UPPERSTRUCTURE SLEW LOCK on Page 10-11-1.)

Raise the blade fully.

Put all the control levers in neutral.

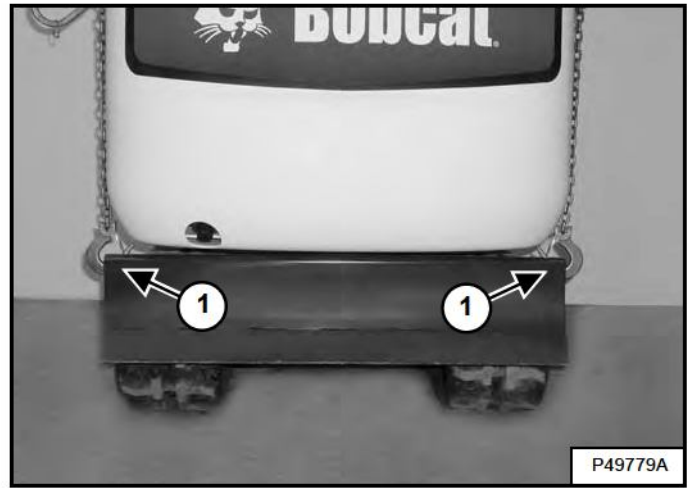
WARNING

AVOID INJURY OR DEATH

- Use a lifting fixture with sufficient capacity for the weight of the excavator plus any added attachments.
- Maintain center of gravity and balance when lifting.
- Do not swing boom or upperstructure. Engage the upperstructure slew lock.
- Never lift with operator on machine.

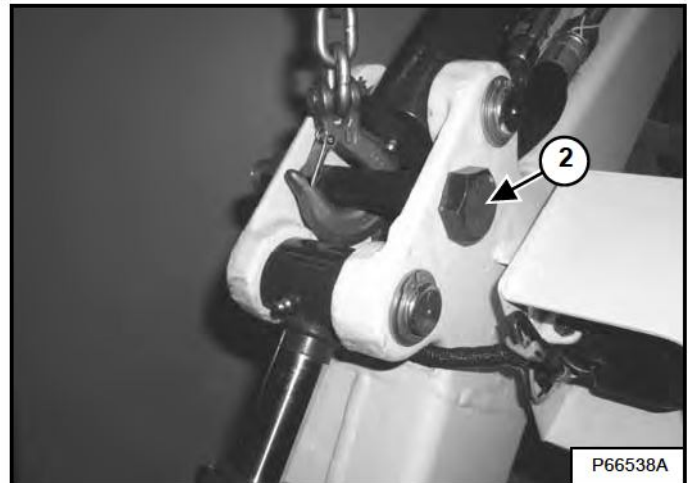
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Figure 10-12-2



Attach chains to the ends of the blade (Item 1) [Figure 10-12-1] and [Figure 10-12-2] and up to a lifting fixture above the canopy / cab. The lifting fixture must extend over the sides of the canopy / cab to prevent the chains from hitting the ROPS / TOPS.

Figure 10-12-3



Install a 25 mm bolt and nut (Grade 5 or 8) through the holes at the boom (Item 2) [Figure 10-12-1] and [Figure 10-12-3]. Attach a chain from the bolt to the lift fixture.

OPERATOR CAB (ROPS / TOPS) (IF EQUIPPED)

Emergency Exits

The left door, front window, and right side rear window provide emergency exits.

Figure 10-20-1



Figure 10-20-2



Slide the right side rear window to the front of the excavator and dismount through the side [Figure 10-20-1], or open the front window and dismount [Figure 10-20-2].

Cab Door

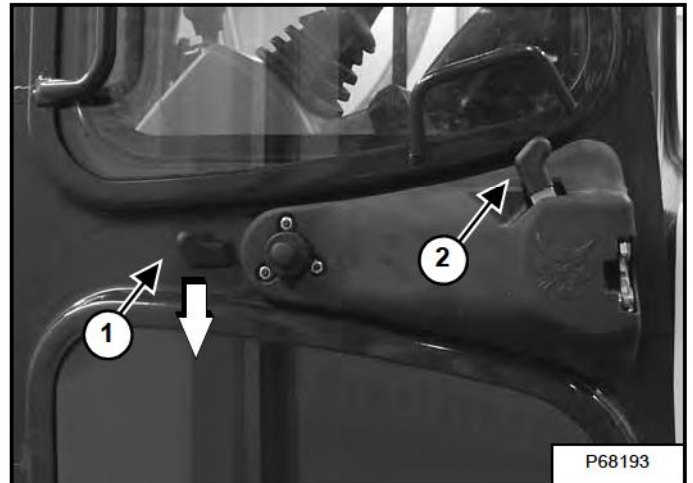
Figure 10-20-3



The cab door can be locked (Item 1) [Figure 10-20-3] with the same key as the starter switch.

Push the door fully open until the latch (Item 2) [Figure 10-20-3] engages to hold the door in the open position.

Figure 10-20-4



When the door is in the open position, push down on the latch (Item 1) [Figure 10-20-4] to close the door.

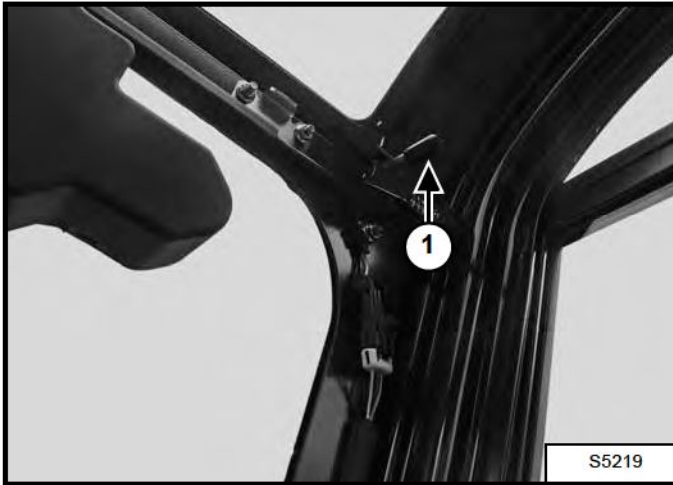
From inside the cab, open the door using the lever (Item 2) [Figure 10-20-4].

**OPERATOR CAB (ROPS / TOPS) (IF EQUIPPED)
(CONT'D)**

Front Window

Opening The Front Window

Figure 10-20-5



Retract the two top latches (Item 1) [Figure 10-20-5].

Figure 10-20-6



Turn the two top latches (Item 1) [Figure 10-20-6] to the unlocked position.

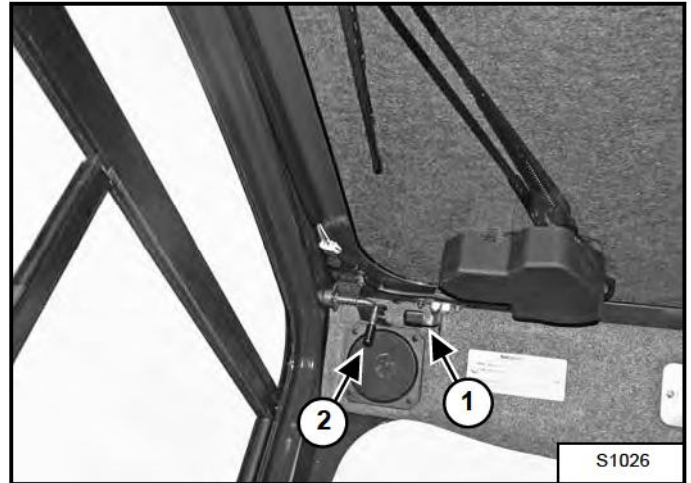
Figure 10-20-7



Use both window handrails to pull the top of the window in [Figure 10-20-7].

Continue moving the window in and up over the operator's head until the window is fully raised.

Figure 10-20-8



When the window is fully raised, the latch (Item 1) will close on the bracket. Turn the two top latches (Item 2) [Figure 10-20-8] to the locked position.

Closing The Front Window

Support the window while releasing both window latch pins (Item 2) [Figure 10-20-8] and placing the pins in the unlocked position.

Support the window using the left handrail and pull down on the latch (Item 1) [Figure 10-20-8] to release the window.

Use both window handrails to pull the window down [Figure 10-20-7].

**OPERATOR CAB (ROPS / TOPS) (IF EQUIPPED)
(CONT'D)**

Front Window (Cont'd)

Closing The Front Window (Cont'd)

Rotate the top latches (Item 1) [Figure 10-20-5] to the locked position.

Front Window Wiper

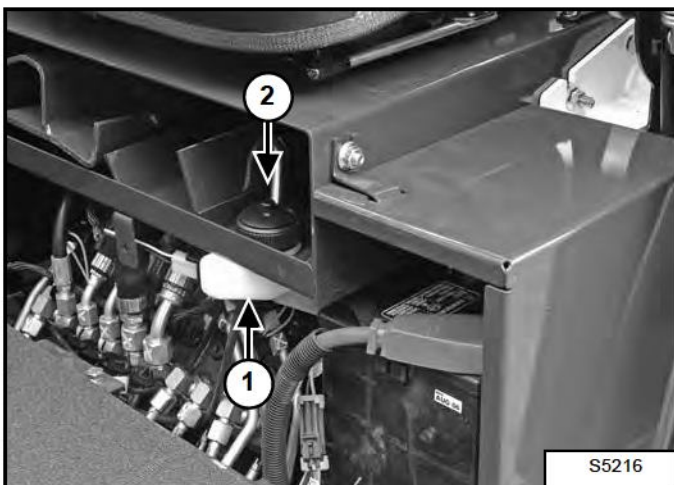
Figure 10-20-9



The front window is equipped with a wiper (Item 1) [Figure 10-20-9] and washer.

Window Washer Reservoir

Figure 10-20-10



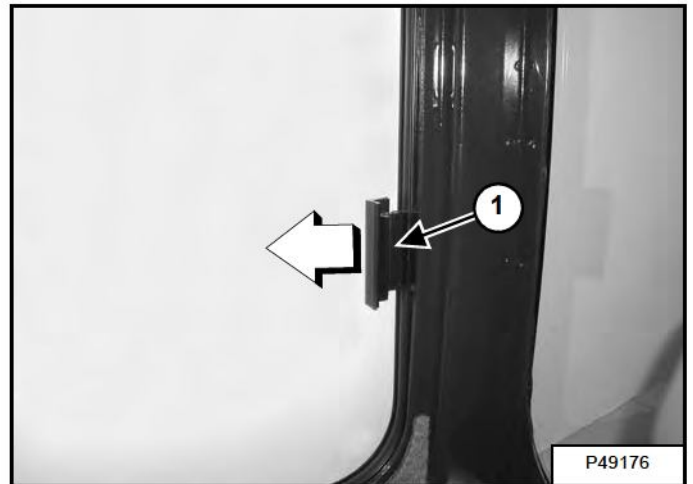
The window washer reservoir (Item 1) [Figure 10-20-10] is located on the inside of the storage compartment door.

The reservoir can be filled by removing the cap (Item 2) [Figure 10-20-10] in the storage compartment.

Right Side Windows

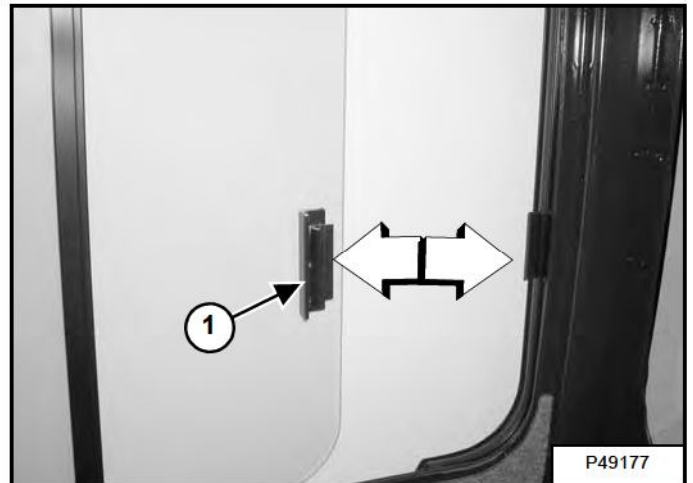
Opening the right rear window

Figure 10-20-11



Pull forward on the latch (Item 1) [Figure 10-20-11].

Figure 10-20-12



Pull the latch / handle (Item 1) [Figure 10-20-12] forward to open the window.

Push the handle back to close the window.

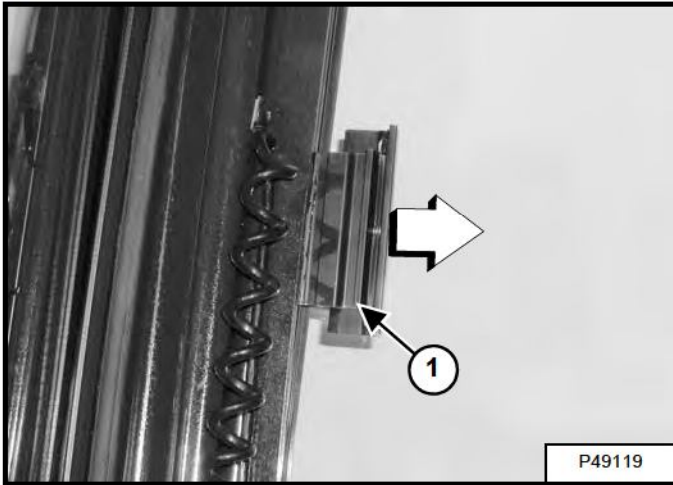
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**OPERATOR CAB (ROPS / TOPS) (IF EQUIPPED)
(CONT'D)**

Right Side Windows (Cont'd)

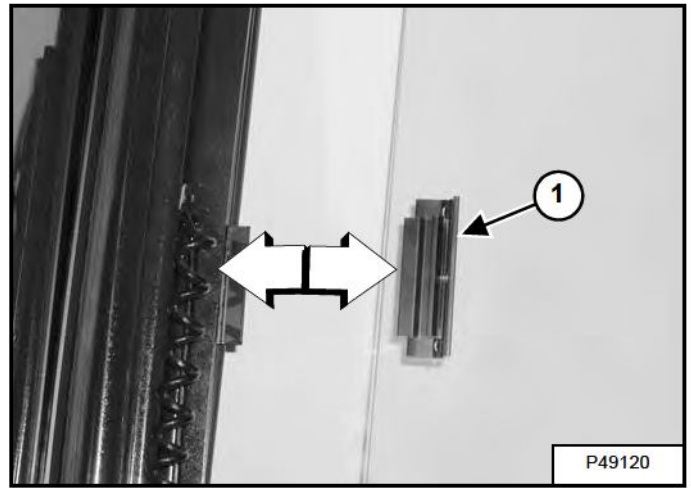
Opening the right front window

Figure 10-20-13



Pull back on the latch (Item 1) [Figure 10-20-13].

Figure 10-20-14



Pull the latch / handle (Item 1) [Figure 10-20-14] back to open the window.

Push the handle forward to close the window.

TRANSPORTING THE EXCAVATOR

When transporting the machine, observe the rules, motor vehicle laws and vehicle limit ordinances. Use a transportation and towing vehicle of adequate length and capacity.

Secure the hand brakes and block the wheels of the transportation vehicle.

Remove the blade extensions (See Extension Removal And Installation on Page 30-10-1).

Retract the track frame if required (See Removal And Installation on Page 30-20-4.) Align the ramps with the centre of the transportation vehicle. Secure the ramps to the truck bed and be sure ramp angle does not exceed 15 degrees.

Use metal loading ramps with a slip resistant surface that are the correct length and width, and can support the weight of the machine.

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

Determine the direction of the track movement before moving the machine (blade forward). Engage the upperstructure slew lock (See UPPERSTRUCTURE SLEW LOCK on Page 10-11-1.)

Figure 10-30-1



Move the machine forward onto the transportation vehicle [Figure 10-30-1].

Do not change direction of the machine while it is on the ramps.

Lower the boom, arm, and bucket to the transportation vehicle.

Stop the engine and remove the key.

Put blocks under the front and rear of the tracks.

Figure 10-30-2



Figure 10-30-3

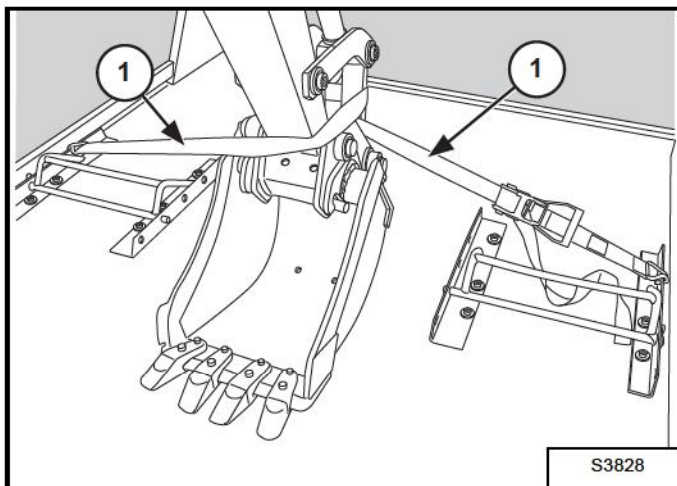


Attach chains to the front corners of the blade and to the tie down loop at the rear [Figure 10-30-2] and [Figure 10-30-3] to prevent it from moving when going up or down slopes, or during sudden stops.

Use chain binders to tighten the chains and then safely tie the chain binder levers to prevent loosening.

TRANSPORTING THE EXCAVATOR (CONT'D)

Figure 10-30-4



When on the transport vehicle, loop the chains through the holes in the mounting frame.

Loop the chain (Item 1) [Figure 10-30-4] around the bucket link.



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

TAILGATE

Opening And Closing The Tailgate

WARNING

AVOID INJURY OR DEATH

Never service or adjust the machine when the engine is running unless instructed to do so in the manual.

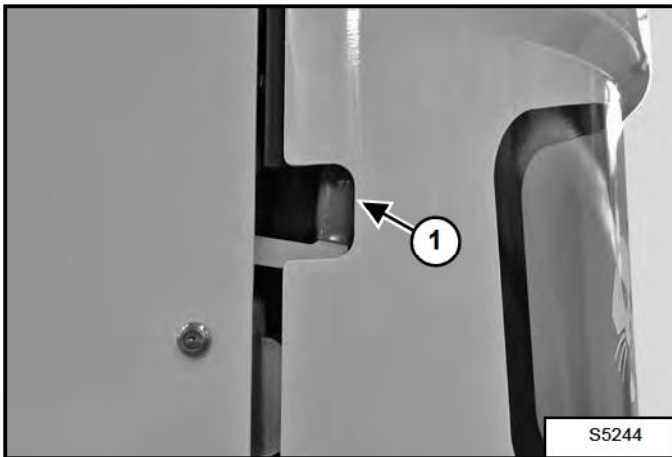
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WARNING

Keep the rear door closed when operating the machine. Failure to do so could seriously injure a bystander.

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Figure 10-40-1



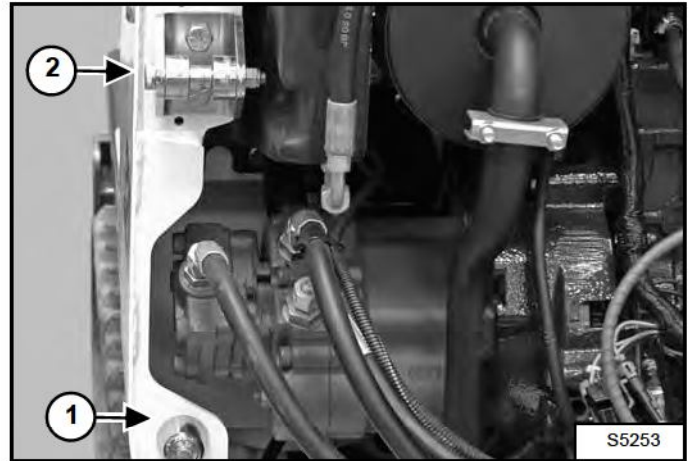
Release the latch (Item 1) [Figure 10-40-1] and pull the tailgate open.

Push firmly to close the tailgate.

NOTE: The tailgate can be locked using the start key.

Adjusting the Bumper

Figure 10-40-2



The door bumper (Item 1) [Figure 10-40-2] can be adjusted for alignment with the tailgate.

Close the tailgate before operating the excavator.

Adjusting The Tailgate Catch

The door catch (Item 2) [Figure 10-40-2] can be adjusted by loosening the two bolts, moving the catch, and tightening the two bolts.

Close the tailgate before operating the excavator.

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SERVICE SCHEDULE

Chart

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



WARNING

AVOID INJURY OR DEATH

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

W-2003-0807

SERVICE SCHEDULE		HOURS					
ITEM	SERVICE REQUIRED	8-10	50	100	250	500	[3]
							1000
Engine Coolant	Check coolant level. Add premixed coolant as needed.						
Engine Oil	Check the engine oil level and add as needed.						
Hydraulic Fluid, Hoses and Tubelines	Check the hydraulic fluid level and add as needed. Check for damage and leaks. Repair or replace as needed.						
Engine Air Filter and Air System	Check condition indicator and empty dust cup as needed. Check air system for leaks.						
Tracks	Check and adjust track tension as needed.						
Indicators and Lights	Check for correct operation of all indicators and lights.						
Control Console Lockout	Check for proper function. Repair or replace as needed.						
Operator Canopy / Cab	Check condition. Check mounting hardware.						
Seat Belt	Check condition. Check mounting hardware.						
Safety Signs and Safety Treads	Check for damaged signs (decals) and safety treads. Replace any signs or safety treads that are damaged or worn.						
Pivot Points	Grease all machinery pivot points.						
Cab Heater Air Filter (Option)	Clean the filter as needed.						
Swing Circle and Pinion	Grease two fittings.						
Fuel Tank and Filter	Drain water and sediment from fuel tank and fuel filter.						
Battery	Check battery, cables, connections and electrolyte level. Add distilled water as needed.						
Alternator / Fan Belt	Check condition of belt and adjust as needed.		[1]				
Spark Arrestor Muffler	Clean the spark chamber.						
Fuel Filter	Replace fuel filter.						
Drive Motor	Check lubricant level in both travel motors.						
Engine Oil and Filter	Replace oil and filter. Use CD or better grade oil and Bobcat filter.		[1]				
Radiator, and Oil Cooler	Clean debris from the radiator fins.						
Hydraulic Filter	Replace the filter.			[2]			
Alternator and Starter	Check the alternator and starter connections.			[2]			
Engine Valves	Check and adjust the engine valve clearance.						
Drive Motor	Replace lubricant in both travel motors.			[2]			
Engine Cooling System	Drain and flush the cooling system. Replace premixed coolant.						
Hydraulic System	Replace the hydraulic fluid and filters. Clean the reservoir.						

- [1] Also at first 50 hours
- [2] Also at first 100 Hours
- [3] Or every 6 months.

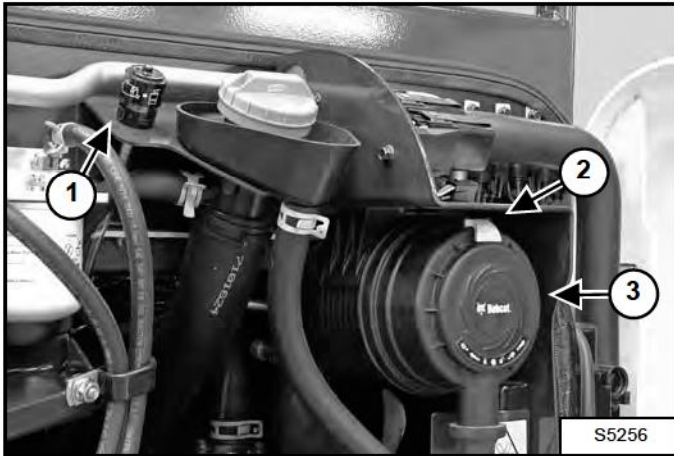
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AIR CLEANER SERVICE

See the SERVICE SCHEDULE (See SERVICE SCHEDULE on Page 10-50-1.) for the correct service interval.

Daily Check

Figure 10-60-1



Check the condition indicator (Item 1) [Figure 10-60-1]. If the red ring shows in the condition indicator, the filter needs to be replaced.

Replacing The Filters

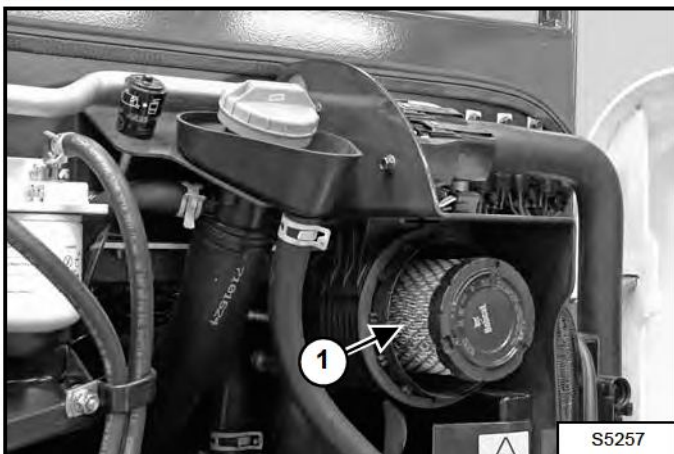
Outer Filter

Pull out the locking tab (Item 2) [Figure 10-60-1].

Turn the dust cup (Item 3) [Figure 10-60-1] counter-clockwise about 1/8 turn.

Remove and clean the dust cup.

Figure 10-60-2



Pull the outer filter (Item 1) [Figure 10-60-2] from the air cleaner housing.

Check the housing for damage.

Clean the housing and the seal surface. DO NOT use compressed air.

Install a new outer filter.

Install the dust cup (Item 3) [Figure 10-60-1] and turn it clockwise about 1/8 turn.

Push the locking tab in (Item 2) [Figure 10-60-1].

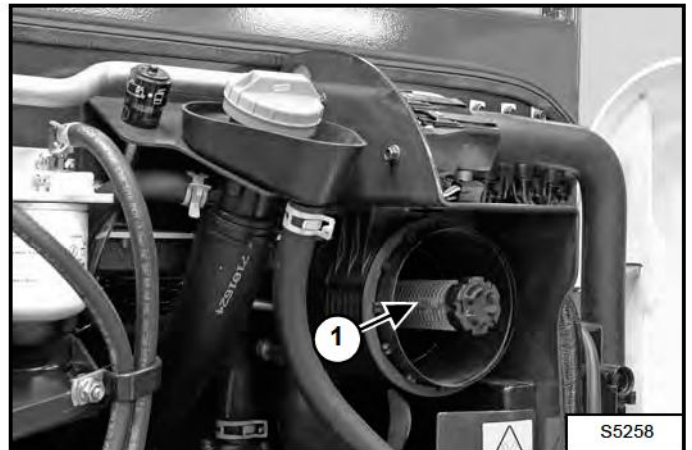
Check the air intake hose and the air cleaner housing for damage. Make sure all connections are tight.

Inner Filter

Only replace the inner filter under the following conditions:

- Replace the inner filter every third time the outer filter is replaced.
- After the outer filter has been replaced, press the button on the top of the condition indicator (Item 1) [Figure 10-60-1] and start the engine. Run at full RPM, then reduce engine speed and stop the engine. If the red ring shows in the condition indicator, replace the inner filter.

Figure 10-60-3



Remove the dust cup (Item 3) [Figure 10-60-1], the outer filter (Item 1) [Figure 10-60-2] and the inner filter (Item 1) [Figure 10-60-3].

NOTE: Make sure all sealing surfaces are free of dirt and debris.

Install the new inner filter.

Install the outer filter and the dust cup.

Press the button on the condition indicator to reset the condition indicator (Item 1) [Figure 10-60-1] (the red ring will not show anymore).



Suggest:

If the above button click is invalid.

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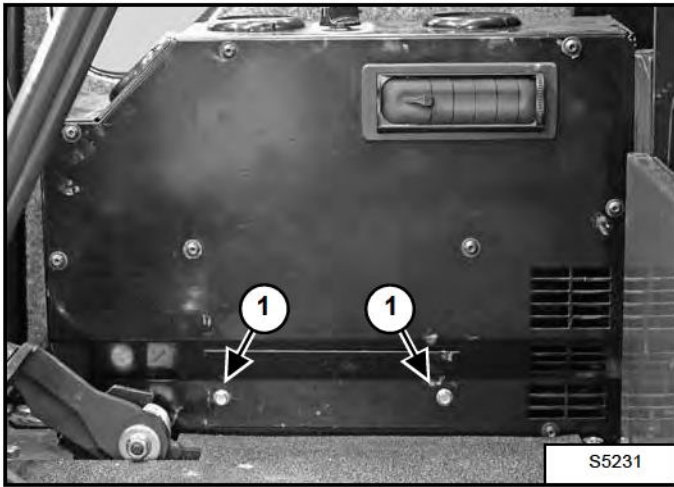
Thank you so much for reading

CAB FILTER

Cleaning And Maintenance

The recirculation filter must be cleaned regularly. The filter is located at the right of the operator seat.

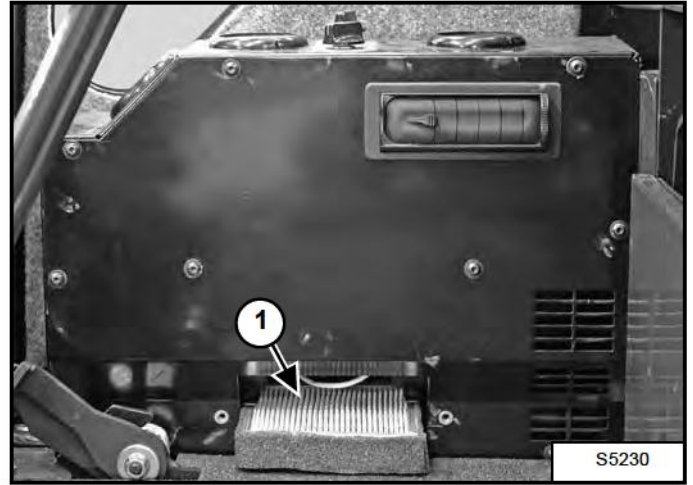
Figure 10-61-1



The recirculation filter is located at the bottom of the heater [Figure 10-61-1].

Loosen the 2 bolts (Item 1) [Figure 10-61-1] to remove the fresh air filter cover.

Figure 10-61-2



Remove the filter (Item 1) [Figure 10-61-2]. Shake the filter or use low air pressure to remove debris. Replace the filter after 3 cleanings or if the filter becomes damaged or too dirty to clean.

Reinstall the filter, cover and bolts.

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