

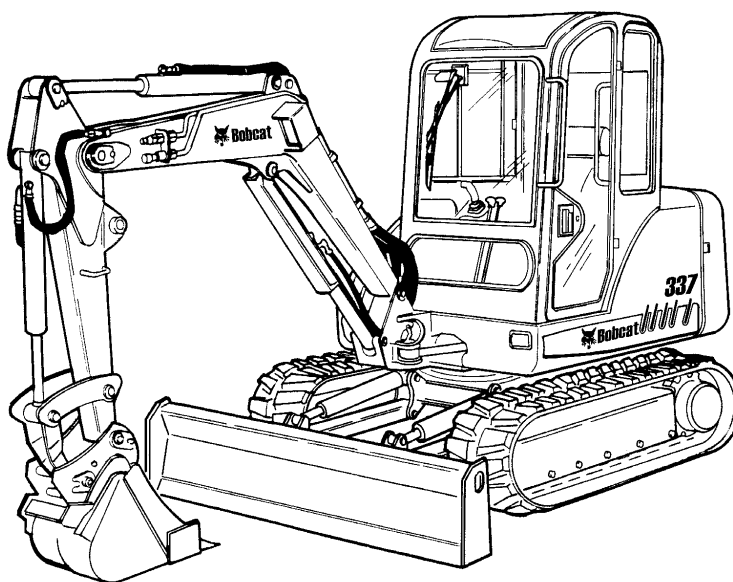
**337**  
**341**



**Bobcat®**

# **Service Manual**

**337 - S/N 234611001 & Above**  
**341 - S/N 234711001 & Above**  
**(G Series)**



# MAINTENANCE SAFETY



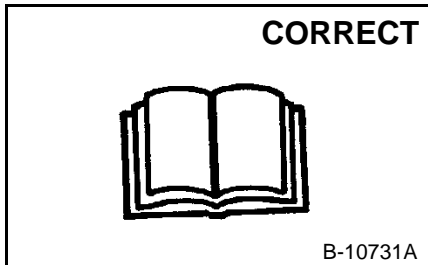
## WARNING

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

W-2003-0903

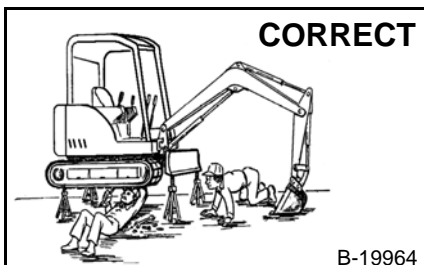


**Safety Alert Symbol:** This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



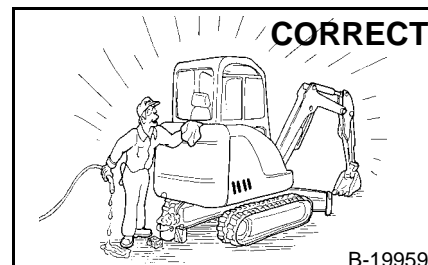
B-10731A

- ⚠ Never service the Bobcat Compact Excavator without instructions.



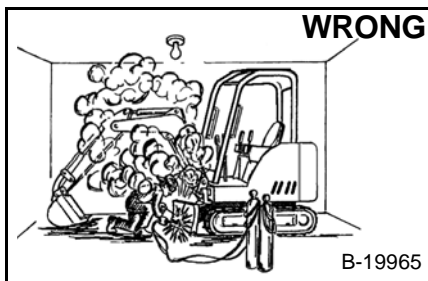
B-19964

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



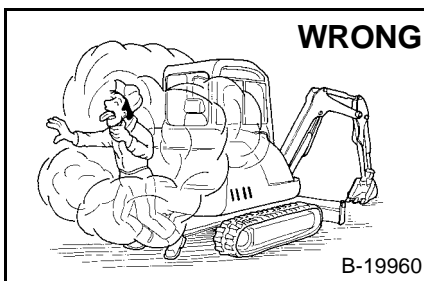
B-19959

- ⚠ Cleaning and maintenance are required daily.



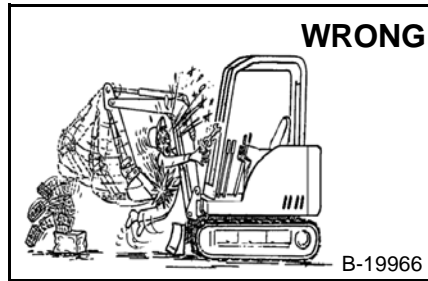
B-19965

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



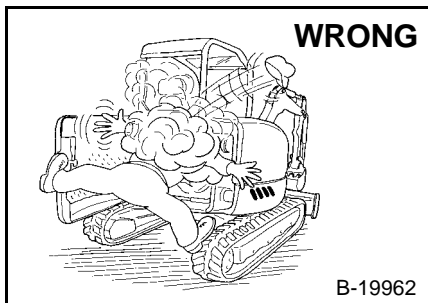
B-19960

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



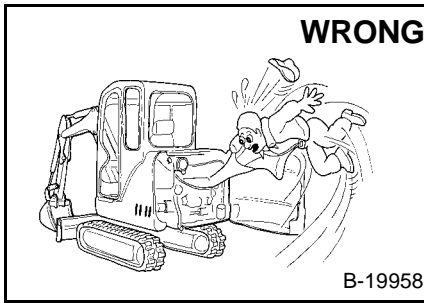
B-19966

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



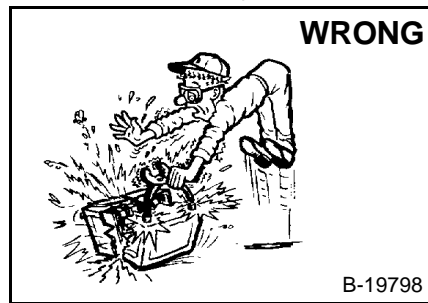
B-19962

- ⚠ 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.



B-19958

- ⚠ 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.



B-19798

- ⚠ 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.

MSW28-0805

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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.

**<https://www.ebooklibonline.com>**

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**SAFETY AND  
MAINTENANCE**

**HYDRAULIC  
SYSTEM**

**UNDERCARRIAGE**

**UPPERSTRUCTURE  
& SWING  
SECTION**

**ELECTRICAL  
SYSTEM AND  
ANALYSIS**

**ENGINE  
SERVICE**

**HVAC**

**SPECIFICATIONS**

# FOREWORD

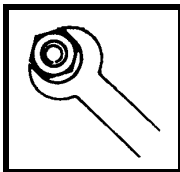
This manual is for the Bobcat Excavator mechanic. It provides necessary servicing and adjustment procedures for the excavator and its component parts and systems. Refer to the Operation & Maintenance Manual for operating instructions, starting procedure, daily checks, etc.

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

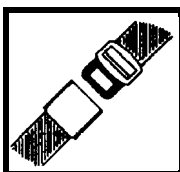
1. Check that the ROPS/TOPS/FOPS is in good condition and is NOT modified.



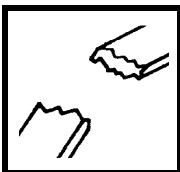
2. Check that ROPS/TOPS mounting hardware is tightened and is Bobcat approved.



3. The seat belt must be correctly installed, functional and in good condition.



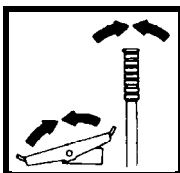
4. Inspect for loose or broken parts or connections.



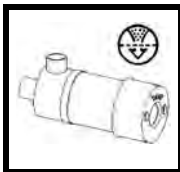
5. Machine signs must be legible and in the correct location.



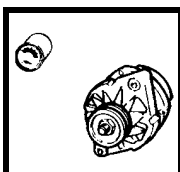
6. Steering levers, control levers and foot pedals must return to neutral. Check that foot pedals lock and control lever locks are in working order.



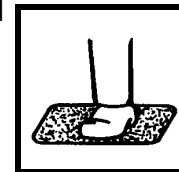
7. Inspect the air cleaner for damage or leaks. Check the condition of the filters.



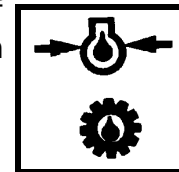
8. Check the electrical charging system.



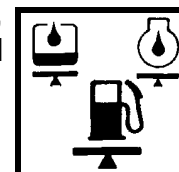
9. Safety treads must be in good condition.



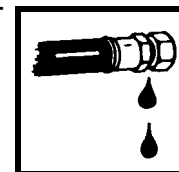
10. Check for correct function of indicator lamps (Optional on some models).



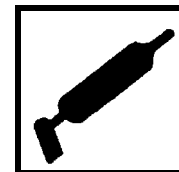
11. Check hydraulic fluid level, engine oil level and fuel supply.



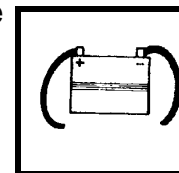
12. Inspect for fuel, oil or hydraulic fluid leaks.



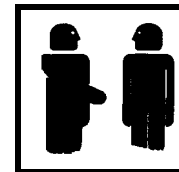
13. Lubricate the excavator.



14. Check the condition of the battery and cables.



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



**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.

## 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.



## WARNING

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

W-2003-0903



## WARNING

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

W-2044-1285

## IMPORTANT

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

I-2019-0284

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](http://www.training.bobcat.com) or [www.bobcat.com](http://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](http://www.training.bobcat.com) or [www.bobcat.com](http://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](http://www.training.bobcat.com) or [www.bobcat.com](http://www.bobcat.com).

SI EXC-1007 SM

337/341 Excavator  
Service Manual

## 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. 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.

**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.).

## 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.

## 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).

## **FIRE PREVENTION (CONT'D)**

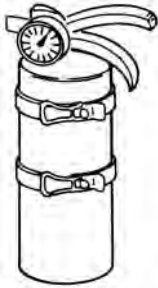
### **Welding And Grinding**

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**



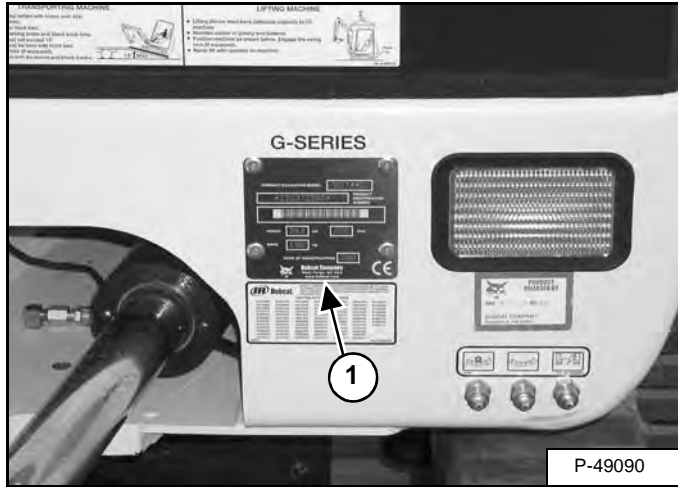
Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.

## SERIAL NUMBER LOCATIONS

Always use the serial number of the excavator 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.

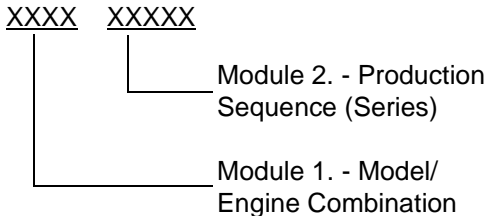
### Excavator Serial Number

Figure 1



The excavator serial number plate (Item 1) [Figure 1] is located on the frame of the machine in the location shown.

Explanation of Excavator Serial Number:



1. The 4 digit Model/Engine Combination Module number identifies the model number and engine combination.
2. The 5 digit Production Sequence Number identifies the order which the excavator is produced.

### Engine Serial Number

Figure 2

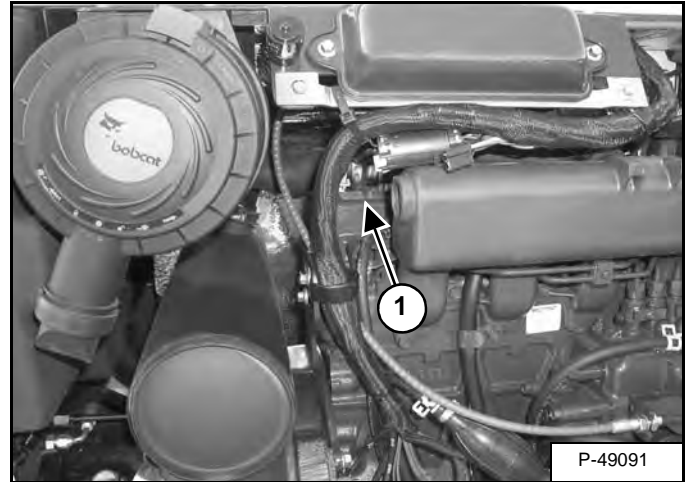
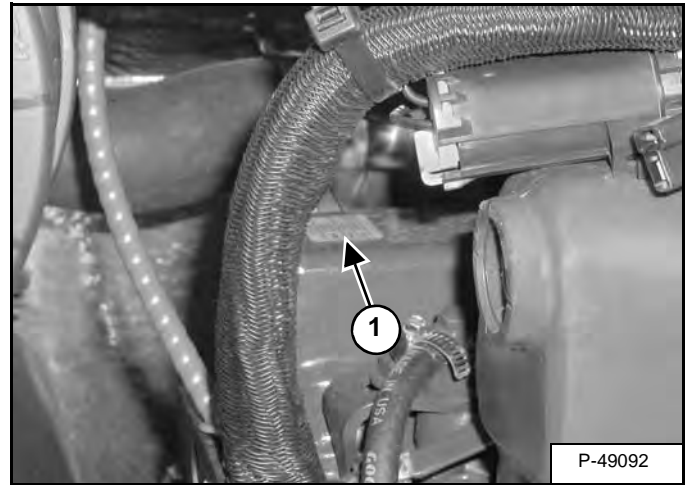


Figure 3



The engine serial number (Item 1) [Figure 2] & [Figure 3] is located on the engine in the location shown.

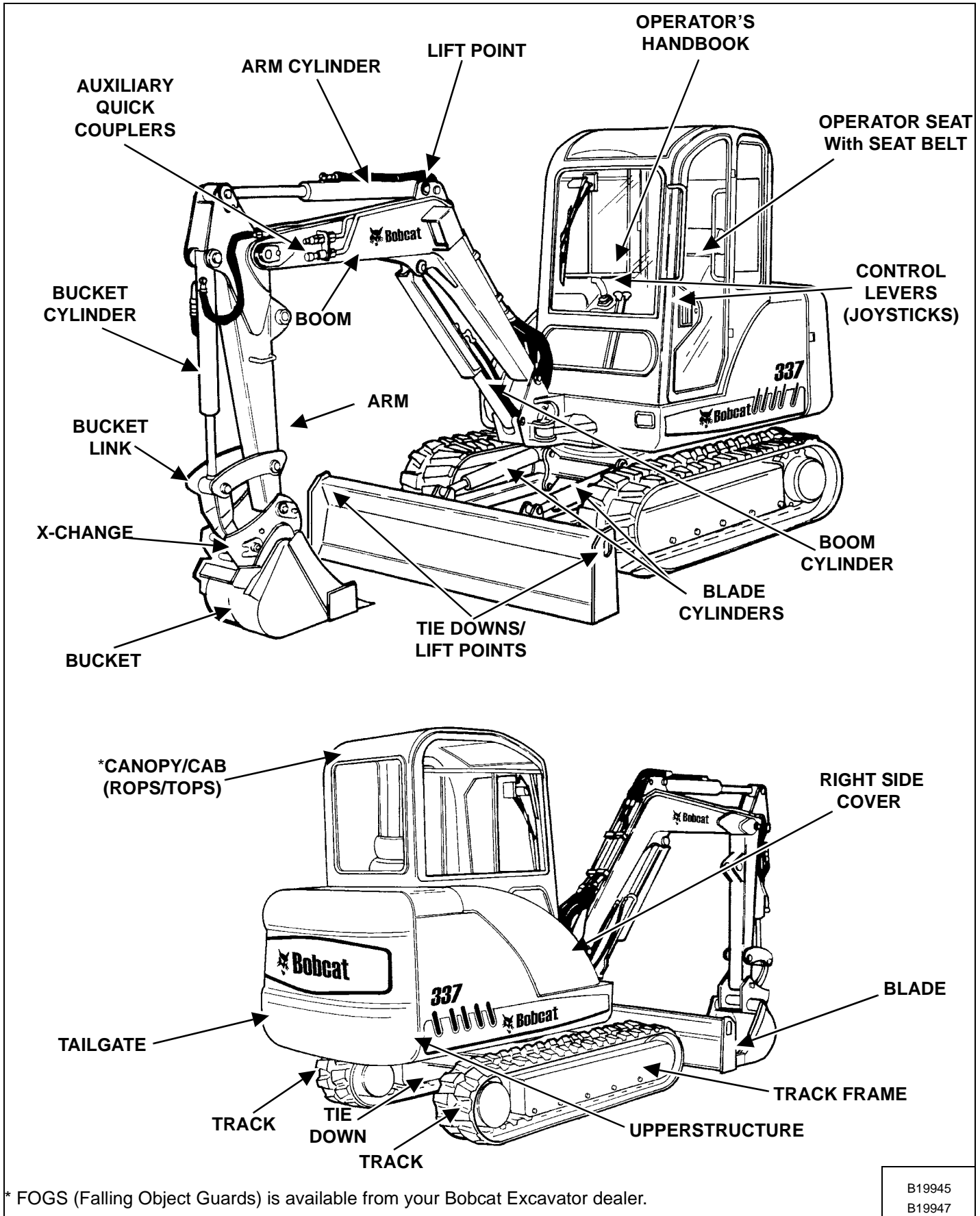
## DELIVERY REPORT

Figure 4

The diagram shows a form titled "DELIVERY REPORT". The form is divided into several sections. At the top right, there is a box labeled "DELIVERY REPORT" containing several horizontal lines for text. To its left is another section with horizontal lines. Below these is a section with a dark header labeled "WARNING" and several lines of text. The bottom right corner of the form contains a small box with the text "B-16315".

The delivery report must be filled out by the dealer and signed by the owner or operator when the Bobcat Excavator is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely **[Figure 4]**.

**BOBCAT EXCAVATOR IDENTIFICATION**



\* FOGS (Falling Object Guards) is available from your Bobcat Excavator dealer.

B19945  
B19947

## SAFETY AND MAINTENANCE

## SAFETY AND MAINTENANCE

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## LIFTING AND BLOCKING THE EXCAVATOR

### **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.

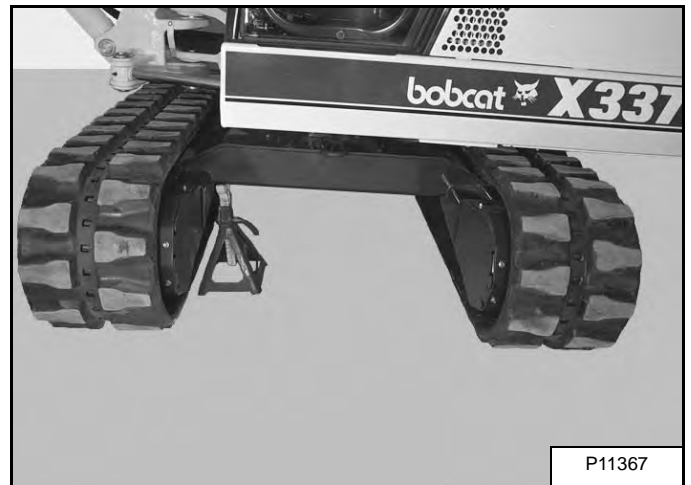
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**Figure 10-10-1**



Raise the machine using the boom and arm **[Figure 10-10-1]**.

**Figure 10-10-2**



Fully raise the blade and install jackstands under the blade **[Figure 10-10-1]** and track frame **[Figure 10-10-2]**.

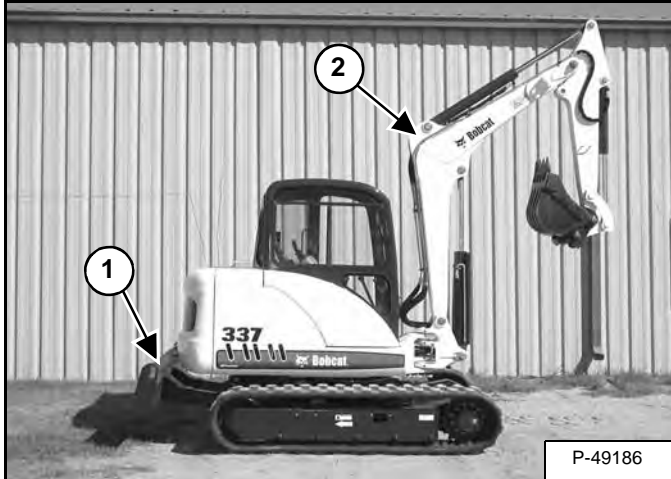
Raise the boom until all the machine weight is on the jackstands.

Repeat the procedure for the other side.

Stop the engine.

## LIFTING THE EXCAVATOR

Figure 10-11-1



Fully extend the cylinders of the bucket, arm & boom so that the Excavator is in the position as shown [Figure 10-11-1].

Raise the blade all the way.

Put all the control levers in neutral.



### 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. En gage the swing locking lever.
- Never lift with operator on machine.

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Figure 10-11-2

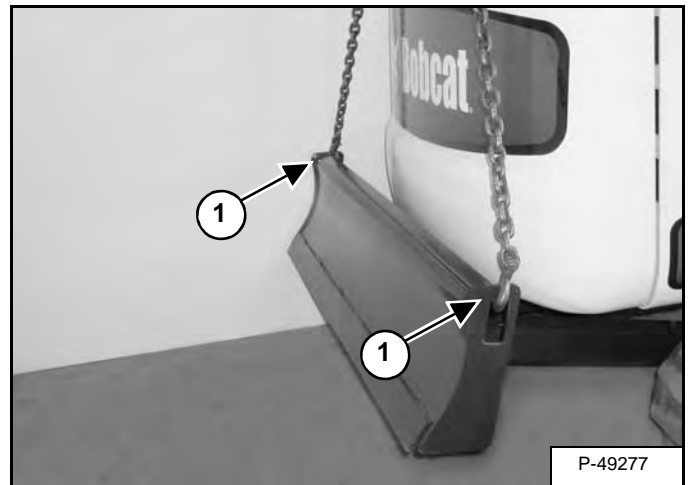
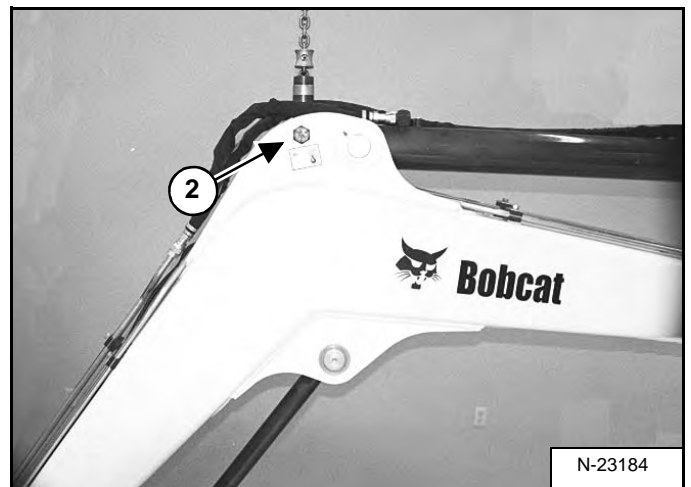


Figure 10-11-3



Fasten chains to the ends of the blade (Item 1) [Figure 10-11-1] & [Figure 10-11-2] 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.

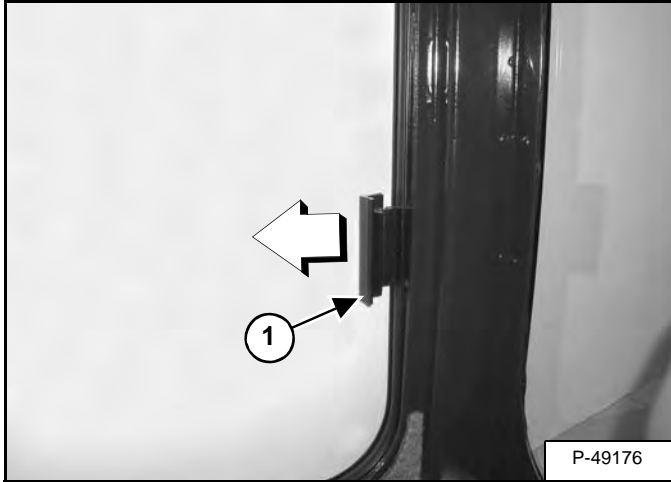
Install a 1 inch (25mm) bolt and nut (Grade 5 or 8) through the holes at the top of the boom (Item 2) [Figure 10-11-1] & [Figure 10-11-3]. Fasten a chain from the bolt to the lift fixture.

## OPERATOR CAB (ROPS/TOPS)

### Emergency Exit

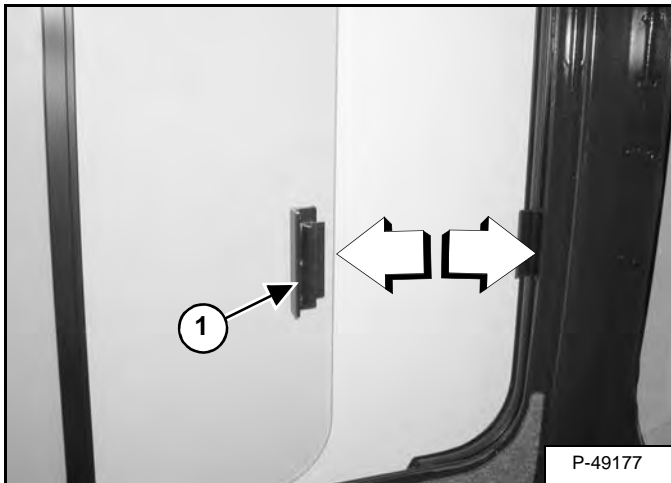
The left door, front window, and right rear window provide exits.

Figure 10-20-1



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

Figure 10-20-2



Pull the latch/handle (Item 1) [Figure 10-20-2] forward to open the window.

Push the handle back to close the window.

Figure 10-20-3



Exit through the window [Figure 10-20-3].

Figure 10-20-4

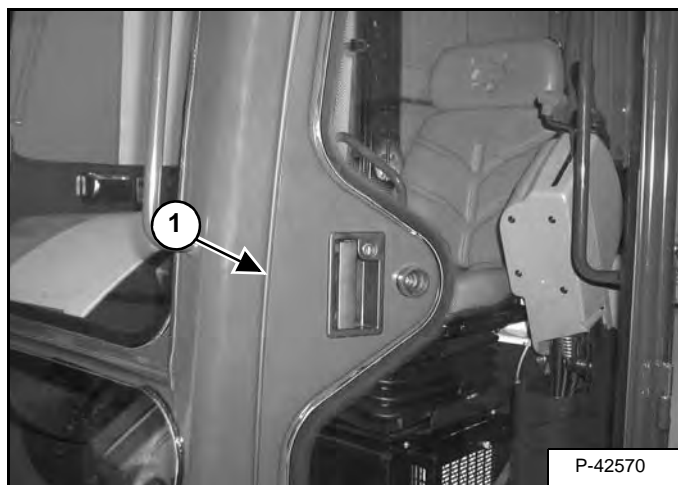


Raise the front window and exit through the window [Figure 10-20-4].

## OPERATOR CAB (ROPS/TOPS) (CONT'D)

### Cab Door

Figure 10-20-5



The cab door (Item 1) [Figure 10-20-5] can be locked with the same key as the starter switch (if equipped).

Figure 10-20-6



Push the door all the way open until the latch engages to hold the door in the open position.

Firmly pull the door away from the cab to disengage the latch and close the door [Figure 10-20-6].

## TRANSPORTING THE EXCAVATOR

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

Secure the parking brakes and block the wheels of the transport vehicle.

Align the ramps with the center of the transport 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.

Use ramps 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 transport vehicle from raising.

Determine the direction of the track movement before moving the machine (blade forward).

**Figure 10-30-1**



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

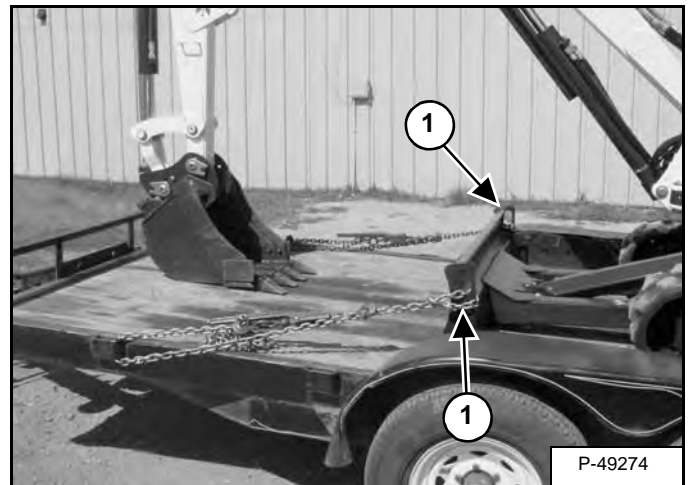
Do not change direction of the machine while it is on the ramps.

Lower the boom, arm, bucket, and blade to the transport vehicle.

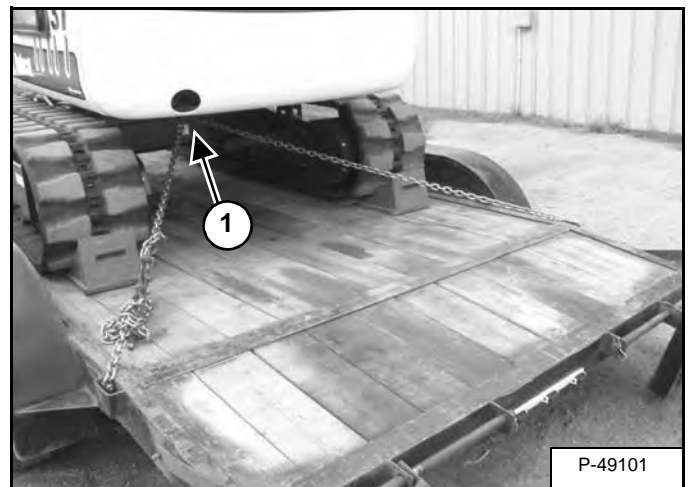
Stop the engine and remove the key (if equipped).

Put blocks at the front and rear of the tracks.

**Figure 10-30-2**



**Figure 10-30-3**



Fasten chains to the front corners of the blade (Item 1) **[Figure 10-30-2]** and to the tie down loop at the rear of the track frame (Item 1) **[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.

## **WARNING**

**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-2058-0494

## TAILGATE

### Opening And Closing The Tailgate



#### AVOID INJURY OR DEATH

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

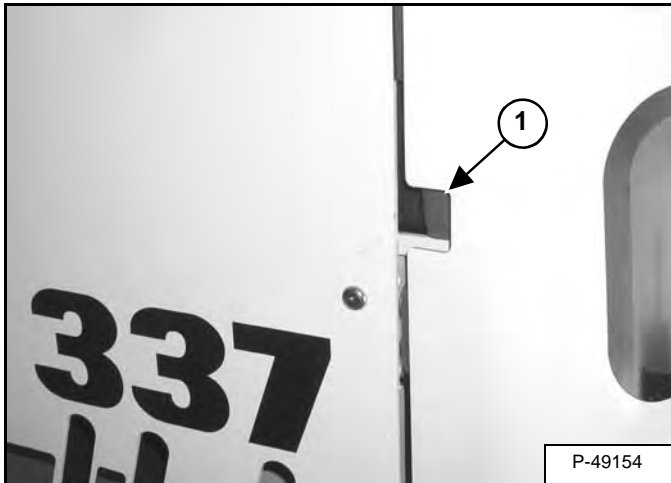
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Keep the rear door closed when operating the machine. Failure to do so could seriously injure a bystander.

W-2020-1285

Figure 10-40-1



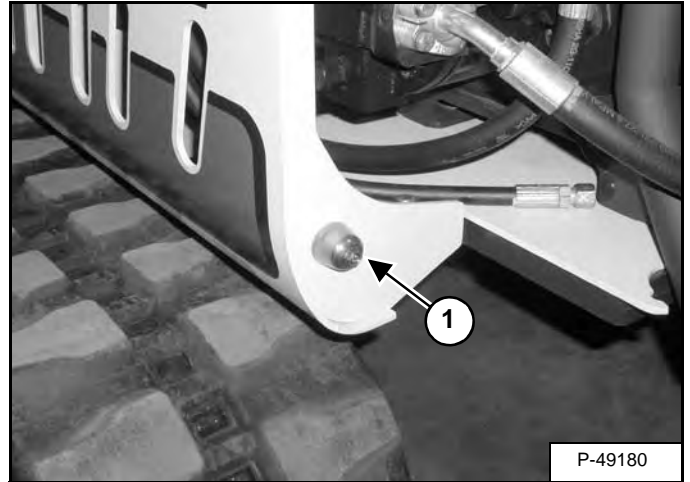
Pull the latch (Item 1) [Figure 10-40-1] and pull the tailgate open.

Push firmly to close the tailgate.

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

### Adjusting The Bumper

Figure 10-40-2

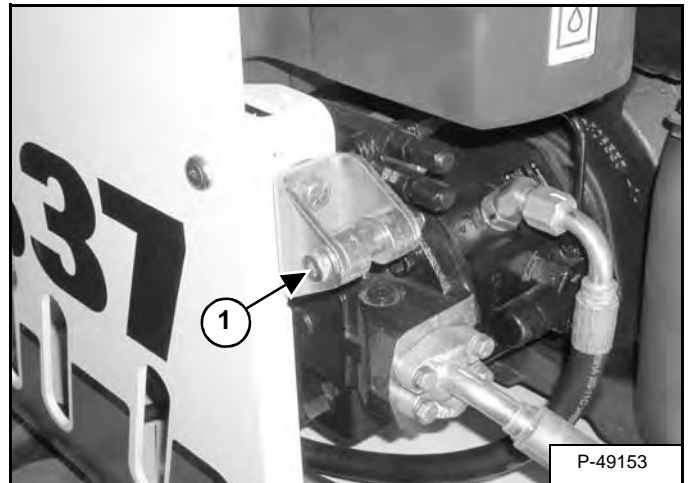


The door bumper (Item 1) [Figure 10-40-2] can be adjusted for alignment with the tailgate.

Close the tailgate before operating the Excavator.

### Adjusting The Latch

Figure 10-40-3



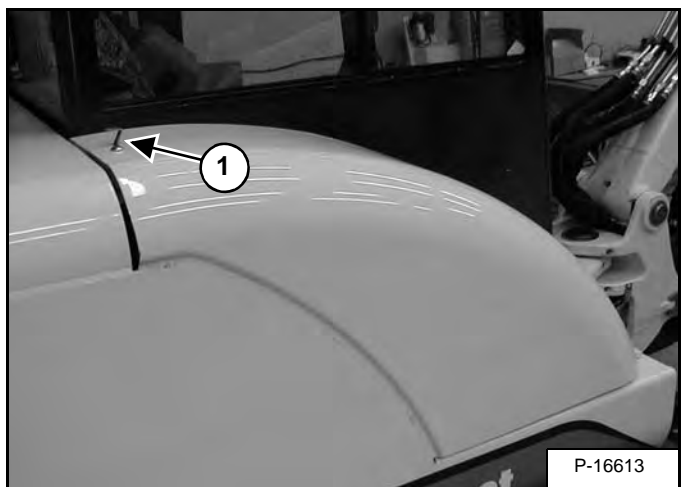
The door catch (Item 1) [Figure 10-40-3] can be adjusted for alignment.

Close the tailgate before operating the Excavator.

## RIGHT SIDE COVER

### Opening And Closing The Right Side Cover

Figure 10-41-1



Pull the latch up (Item 1) [Figure 10-41-1] and raise the right side cover.

**NOTE:** The right side cover can be locked using the start key.

## 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

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

W-2003-0903

SERVICE SCHEDULE		HOURS					
ITEM	SERVICE REQUIRED	8-10	50	100	250	500	■ 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, Reservoir Breather Cap	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.						
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	Clean the filter as needed.						
Console Lockout	Check console lockout for proper operation. Repair or replace as needed.						
X-Change™	Lubricate and inspect for damage or loose parts.						
Swing Circle and Pinion	Grease two fittings.						
Fuel Tank & Filter	Drain water and sediment from fuel tank and fuel filter.						
Battery	Check battery, cables, connections and electrolyte level. Add distilled water as needed.						
Accessory Drive Belt	Check condition of belt and adjust as needed.		●				
Spark Arrestor Muffler	Clean the spark chamber.						
Fuel Filter	Replace fuel filter.						
Travel Motor	Check the oil level in both travel motors						
Radiator, Oil Cooler, *A/C	Clean debris from the radiator fins.						
Engine Oil and Filter	Replace oil and filter use CD or better grade oil and Bobcat filter.		●				
Primary Hydraulic Filter	Replace the primary hydraulic filter.			^			
Case Drain Filter	Replace the case drain filter.			^			
Alternator & Starter	Check the alternator and starter connections.						
Engine Valves	Check and adjust the engine valve clearance.						
Engine Cooling System	Drain and flush the cooling system. Replace the coolant.						
Hydraulic System	Replace the hydraulic fluid and filters. Clean the reservoir.						
Travel Motor	Replace the oil in both travel motors.						

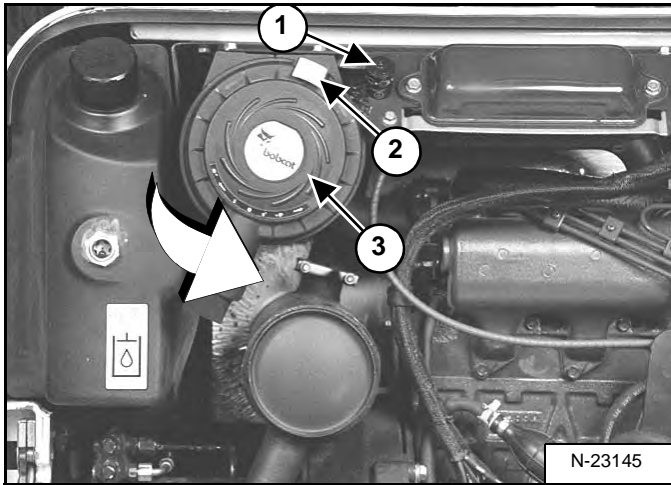
- \* If Equipped
- Also at *first* 50 Hours
- ^ Also at *first* 100 Hours
- Or every 6 months.

## AIR CLEANER

### Checking

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

**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.

Replace the inner filter every third time the outer filter is replaced or as indicated.

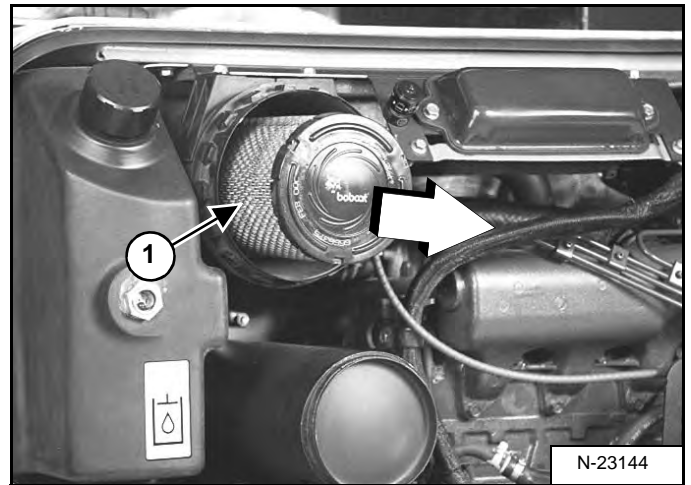
## Replacing The Filters

### Outer Filter

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

Remove and clean the dust cup (Item 3) [Figure 10-60-1].

**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.

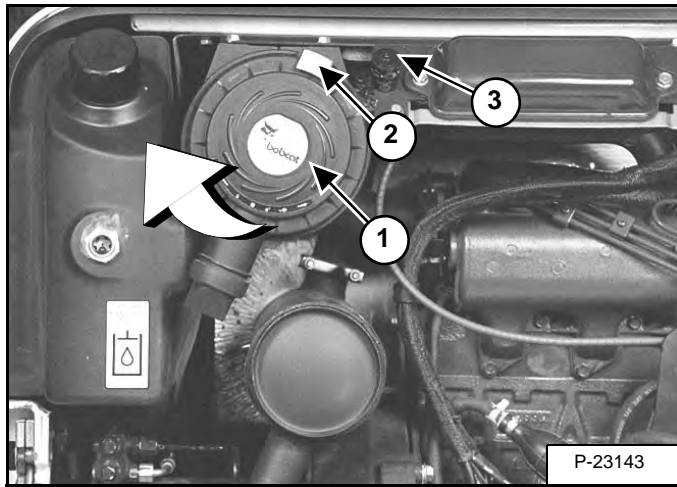
Install a new filter.

## AIR CLEANER (CONT'D)

### Replacing The Filters (Cont'd)

#### Outer Filter (Cont'd)

Figure 10-60-3



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

Push the locking tab in (Item 2) [Figure 10-60-3].

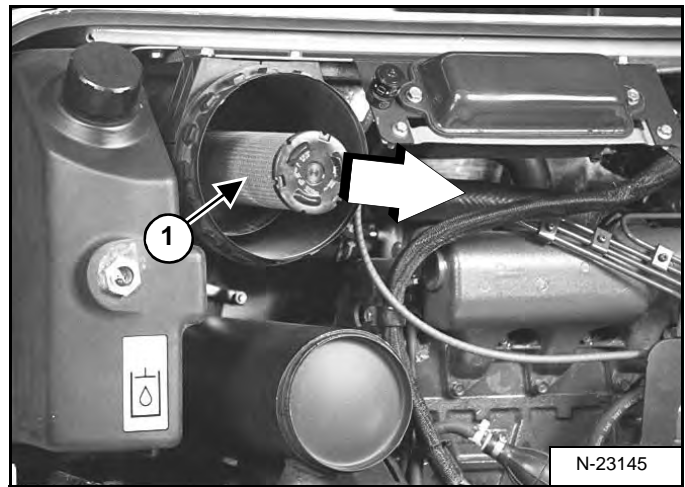
Check the air intake hose and the air cleaner housing for damage. Make sure all connections are tight.

#### 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 (Item 3) [Figure 10-60-3] on the top of the condition indicator 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 10-60-4



Remove the dust cup, outer filter and inner filter (Item 1) [Figure 10-60-4].

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

Install the new inner filter.

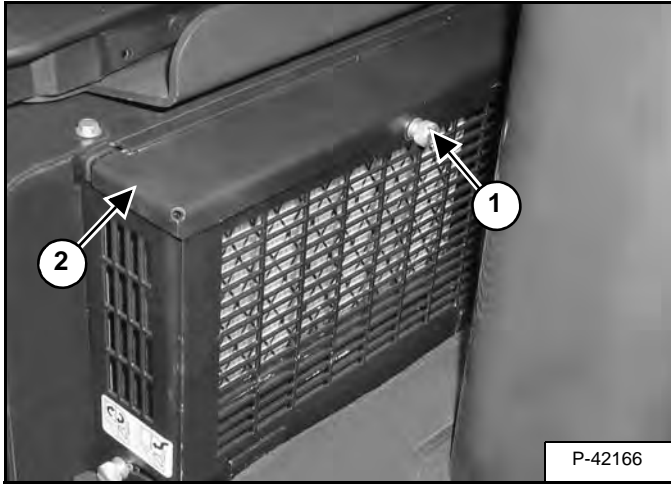
Install the outer filter and the dust cup.

Press the button on the condition indicator to remove the red ring.

## HEATER AIR FILTER

### Fresh Air Filter

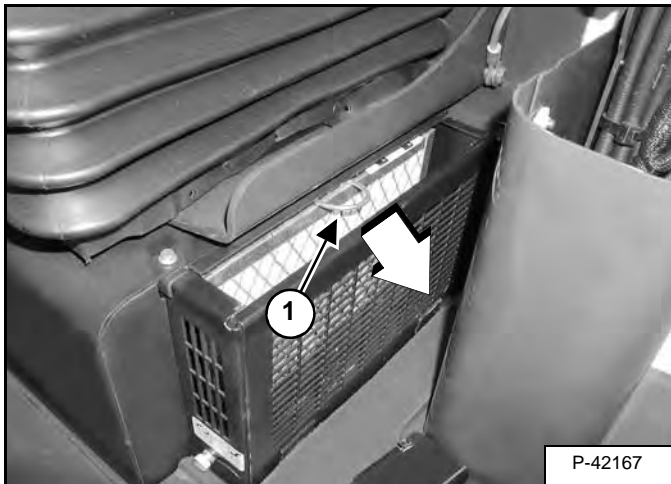
Figure 10-61-1



The heater filter must be cleaned regularly. The filter is located at the left of the operator seat [Figure 10-61-1].

Remove the screw (Item 1) and cover (Item 2) [Figure 10-61-1].

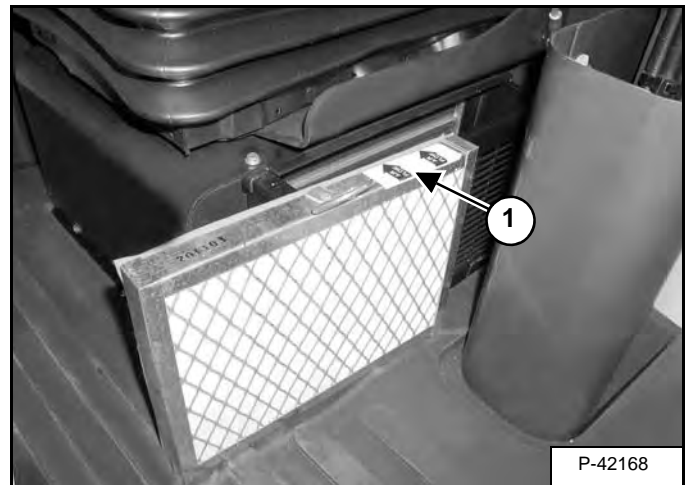
Figure 10-61-2



Pull the filter (Item 1) [Figure 10-61-2] away and out of the heater/AC housing.

Use low air pressure to clean the filter; replace when very dirty.

Figure 10-61-3



**Installation:** Install the filter with the arrows that indicate air flow direction (Item 1) [Figure 10-61-3] pointing towards the heater/AC housing.



**Suggest:**

**If the above button click is invalid.**

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## COOLING SYSTEM

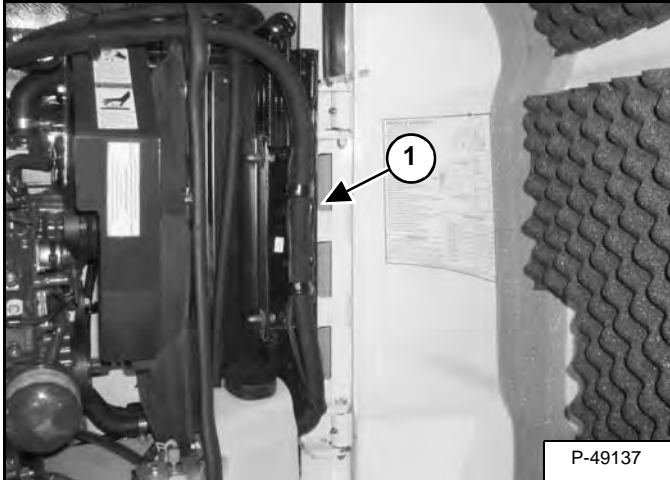
Check the cooling system every day to prevent overheating, loss of performance or engine damage.

### Cleaning The Cooling System

**NOTE:** Allow the cooling system and engine to cool before servicing or cleaning the cooling system.

Open the tailgate.

Figure 10-70-1



Use air pressure or water pressure to clean the radiator and oil cooler (Item 1) [Figure 10-70-1]. Be careful not to damage fins when cleaning.

Close the tailgate.

## WARNING

Do not remove radiator cap when the engine is hot. You can be seriously burned.

W-2070-1285

## WARNING

Wear safety glasses to prevent eye injury when any of the following conditions exist:

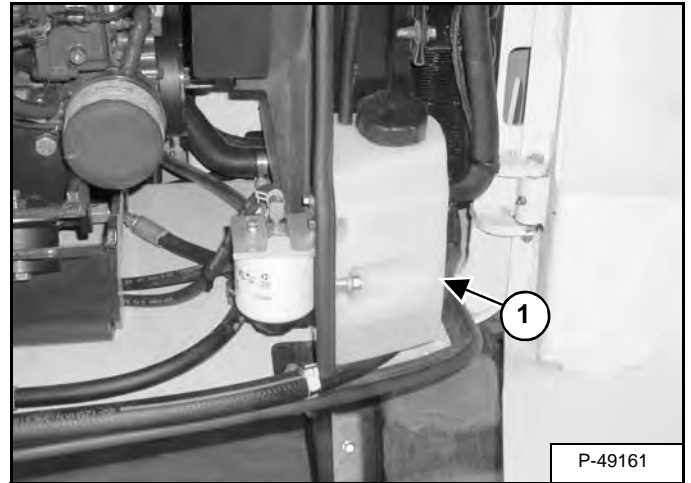
- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-1285

## Checking Coolant Level

Open the tailgate.

Figure 10-70-2



Check the coolant level in the coolant recovery tank (Item 1) [Figure 10-70-2].

The coolant level must be between the MIN and MAX marks on the coolant recovery tank when the engine is cold.

**NOTE:** The cooling system is factory filled with propylene glycol (purple color). DO NOT mix propylene glycol with ethylene glycol.

Close the tailgate.

## IMPORTANT

### AVOID ENGINE DAMAGE

Always use the correct ratio of water to antifreeze.

Too much antifreeze reduces cooling system efficiency and may cause serious premature engine damage.

Too little antifreeze reduces the additives which protect the internal engine components; reduces the boiling point and freeze protection of the system.

Always add a premixed solution. Adding full strength concentrated coolant can cause serious premature engine damage.

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