

# **Bobcat**®

## **Service** Manual

S/N 232511001 & Above S/N 232711001 & Above S/N 232611001 & Above (D Series)

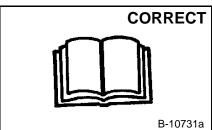


#### MAINTENANCE SAFETY

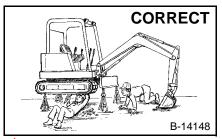


Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death. W-2003-0903

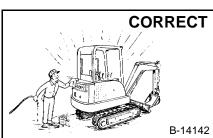
Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



service **Bobcat** Never the Hydraulic **Excavator** without instructions.



Use the correct procedure to lift and support the excavator. Always lift the blade fully before installing jackstands.

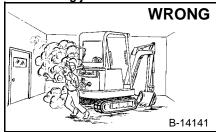


Cleaning and maintenance are required daily.



good Have ventilation when welding or grinding painted

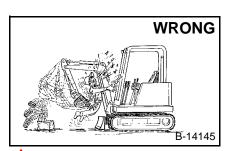
Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.



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 moving away from 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 protection approved for

type of welding. Keep rear door closed except for service. Close and latch door before operating the excavator.



Lead-acid batteries produce flammable and explosive gases.

Keep arcs, sparks, flames and tobacco away lighted 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.



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SAFETY AND MAINTENANCE

HYDRAULIC SYSTEM

**UNDERCARRIAGE** 

UPPERSTRUCTURE & SWING SECTION

ELECTRICAL SYSTEM AND ANALYSIS

ENGINE SERVICE

HEATING, VENTILATION, AIR CONDITIONING

**SPECIFICATIONS** 



#### **FOREWORD**

This manual is for the Bobcat Hydraulic excavator mechanic. It provides necessary servicing and adjustment procedures for the hydraulic 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 hydraulic excavator has had service or repair:

 Check lift arm support device, replace if damaged. (Stored Position)



9. Safety treads must be in good condition.



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



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



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



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



4. Inspect for loose or broken parts or connections.



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



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



13. Lubricate the excavator.



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



14. Check the condition of the battery and cables.



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



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



8. Check the electrical charging system.





#### **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**

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W-2003-0903



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 shoptype 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-0206 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.



## **Call Before You Dig**

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