863

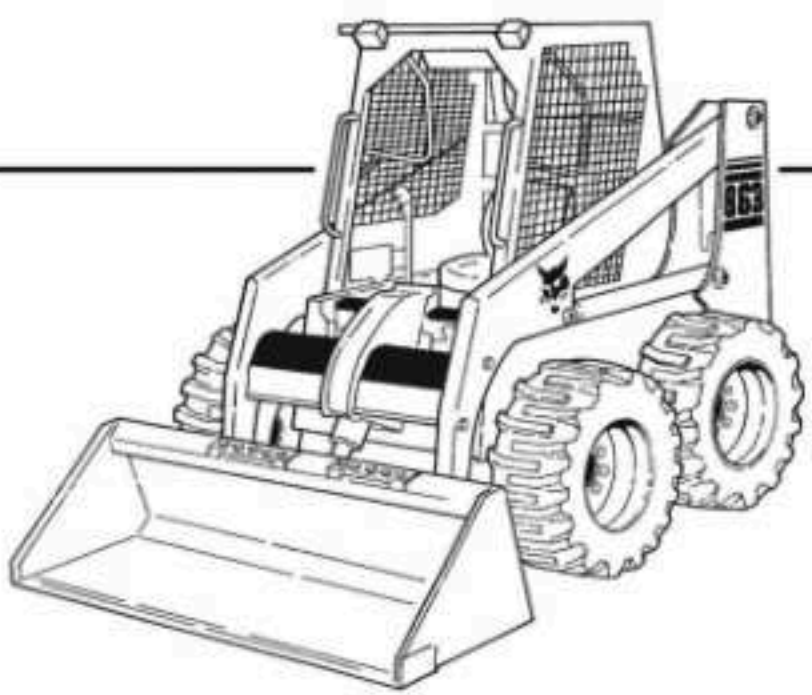
863

HIGH FLOW

Bobcat®

Operation & Maintenance Manual

S/N 514411001 – 514427599
S/N 514511001 – 514525299
S/N 514611001 – 514625299



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6900373 (9-98) Revised (5-00)

Bobcat
Printed in U.S.A.

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CONTENTS

FOREWORD iii
SAFETY ix
OPERATING INSTRUCTIONS 1
PREVENTIVE MAINTENANCE 37
SYSTEM ANALYSIS 75
MACHINE SIGN TRANSLATIONS 81
SPECIFICATIONS 91

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.

REFERENCE INFORMATION

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

Loader Serial Number ..... _____
Engine Serial Number ..... _____
_____
_____
_____

NOTES: _____
_____
_____
_____
_____
_____

YOUR LOADER DEALER: _____
ADDRESS: _____
PHONE: _____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040–0128

Bobcat Company Europe
J. Huysmanslaan 59
B–1651 LOT
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 loader. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR LOADER. If you have any questions, see your Bobcat loader dealer.

SERIAL NUMBER LOCATIONS v

DELIVERY REPORT v

BOBCAT LOADER IDENTIFICATION vi

OPTIONS AND ACCESSORIES vii

SERIAL NUMBER INFORMATION iv

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HYDRAULIC CONTROLS (Cont'd.)

Attachment Functions Control (If Equipped)

(Attachment Control Kit Required) (Item 1) **[A]**

This kit, when installed, allows the use of other switches on the right and left control handles (Deluxe Handles) for functions such as water spray, left/right turn signals (Europe only), raise/lower the left/right ends of the moldboard on a Grader, etc.

The following are examples only, consult Attachment Operation & Maintenance Manual.

Switch (Item 1) **[B]** . . . Left/Right Turn Signals
Switch (Item 2) **[B]** . . . Left Moldboard Up/Down
Switch (Item 3) **[B]** . . . Right Moldboard Up/Down
Switch (Item 4) **[B]** . . . Water Spray

DAILY INSPECTION

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear and early failures. The Service Schedule **[C]** is a guide for correct maintenance of the Bobcat loader. It is located inside the rear door of the loader and also in the *MACHINE SIGN TRANSLATION* Section Page 81.

Daily Inspection and Maintenance:

- Engine Oil Level
- Hydraulic/Hydrostatic Fluid Level
- Engine Air Filter, Air System for Damage or Leaks
- Engine Coolant Level, System for Damage or Leaks
- Operator Cab, Seat Belt, Seat Bar, Pedal Interlocks, & Hand Control Interlocks Mounting Hardware
- Grease Pivot Pins (Lift Arms, Bob–Tach, Cylinders, Bob–Tach Wedges
- Tires for Wear or Damage and Correct Air Pressure
- Fuel Filter, Remove Trapped Water
- Loose or Broken Parts
- Safety Treads and Safety Signs (Decals)
- Bobcat Interlock Control System (BICS™)
- Lift Arm Support Device

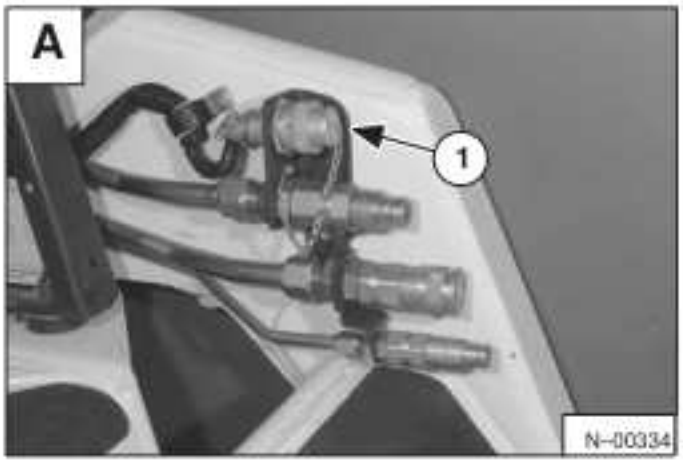
NOTE: Fluids such as engine oil, hydraulic fluid, coolant, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for correct disposal.

⚠ WARNING

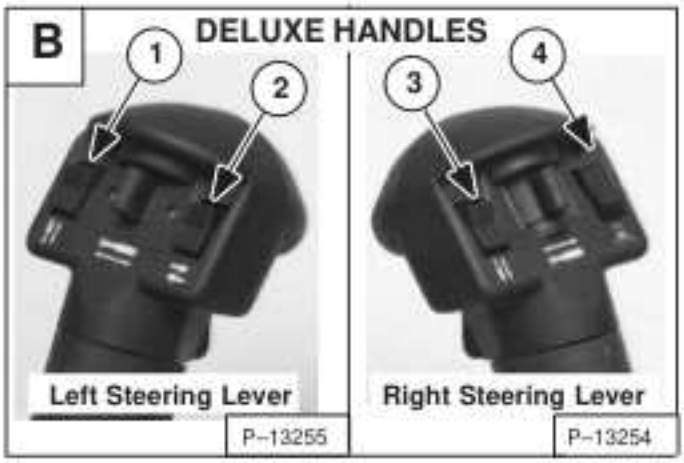
Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece or cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical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

W–2072–0496

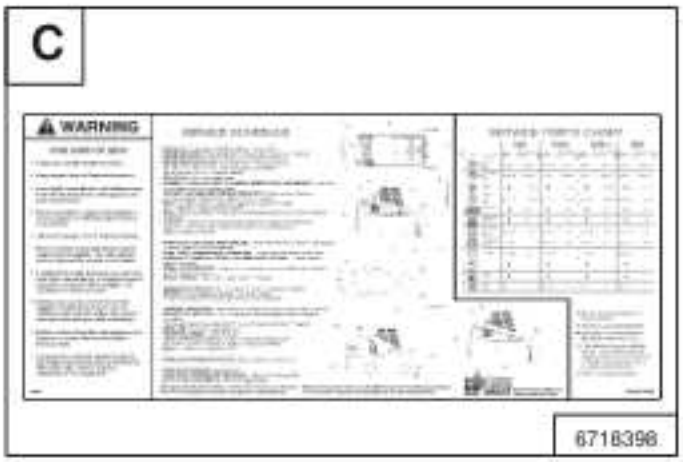
A



B



C



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⚠ WARNING

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–2052–1285

The dealer can identify, for each model loader, the attachments and buckets approved by Bobcat Company. The buckets and attachments are approved for rated operating capacity and for secure fastening to the Bob–Tach.

The rated operating capacity for this loader is shown on a label in the operator cab. (See *SPECIFICATIONS* Section Page 89.)

The rated operating capacity is determined by using a standard dirt bucket, and material of normal density, such as dirt or dry gravel. If longer buckets are used, the load center moves forward and reduces the rated operating capacity. If very dense material is loaded, the volume must be reduced.

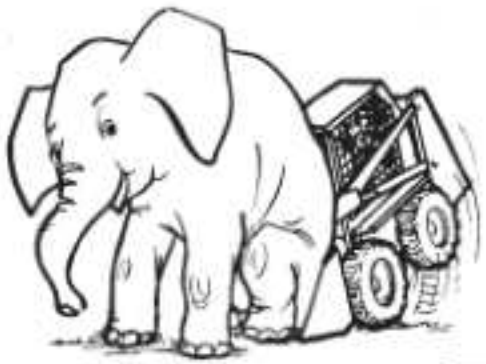
Exceeding the rated operating capacity **[A]** can cause the following problems:

- Steering the loader may be difficult.
- Tires will wear faster.
- There will be a loss of stability.
- The life of the Bobcat loader will be reduced.

Use the correct size bucket for the type and density of material being handled. For safe handling of materials and avoiding machine damage, the attachment (or bucket) should handle a full load without going over the rated operating capacity for the loader. Partial loads make steering more difficult.

Maximum load to be carried when using a pallet fork are shown in figure **[B]**. See your Bobcat loader dealer for more information about loader counterweights, pallet forks and other available attachments.

A



B–06587

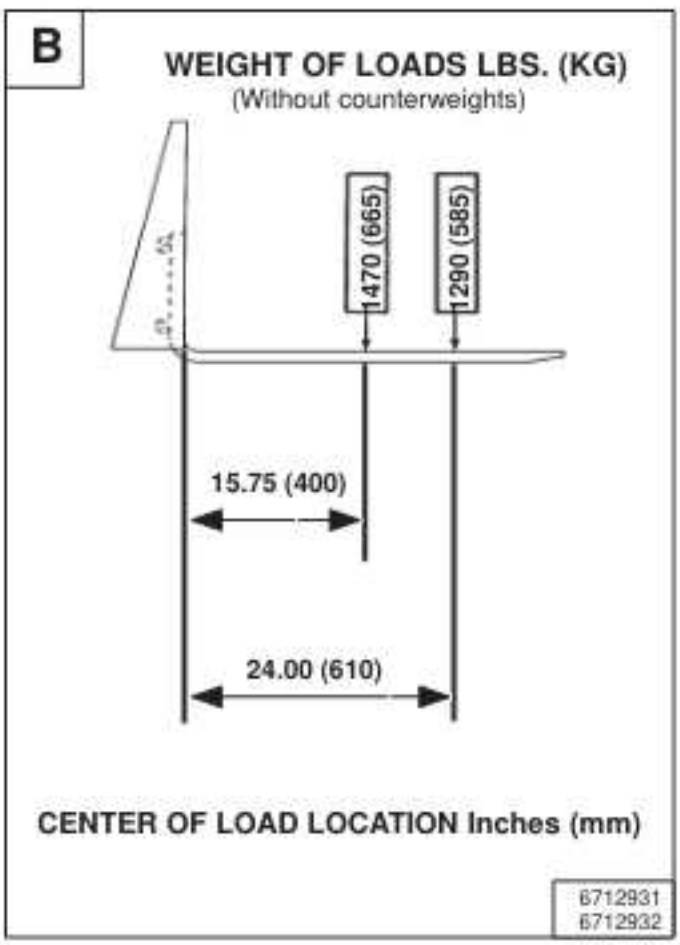
⚠ WARNING

AVOID INJURY OR DEATH

Do not exceed rated operating capacity. Excessive load can cause tipping or loss of control.

W–2053–0887

B



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SERVICE SCHEDULE

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 loader.

⚠ WARNING

Instructions are necessary before operating or servicing machine. Read Operation & Maintenance Manual, 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. Failure to follow instructions can cause injury or death.

W–2003–0797

SERVICE SCHEDULE		HOURS					
ITEM	SERVICE REQUIRED	8–10	50	250	500	■ 1000	◊ 3000
Engine Oil	Check the oil level and add oil as needed.						
Engine Air Filter and Air System	Check condition indicator or display panel. Service only when required. Check for leaks and damaged components.						
Engine Cooling System	Clean debris from oil cooler radiator & grill. Check coolant level cold, add premixed coolant as needed.						
Lift Arms, Cyl., Bob–Tach Pivot Pins and Wedges	Lubricate with multi–purpose lithium based grease (12 places).						
Tires	Check for damaged tires and correct air pressure.						
Seat Belt, Seat Bar & Pedal Interlocks or Hand Control Interlocks	Check the condition of seat belt. Check the seat bar and foot pedal interlocks or hand control interlocks for correct operation. Clean dirt and debris from moving parts.						
Bobcat Interlock Control System (BICS™)	Check BICS™ functions. Clean dirt, debris or objects from under or behind seat and around brake pedal as required.						
Safety Signs and Safety Treads	Check for damaged signs (decals) and safety treads. Replace any signs or safety treads that are damaged or worn.						
Operator Cab	Check the fastening bolts, washers and nuts. Check the condition of cab.						
Fuel Filter	Remove trapped water.						
Hyd. Fluid, Hoses and Tubelines	Check fluid level & add as needed. Check for damage & leaks. Repair or replace as needed.						
Final Drive Trans.(Chaincase)	Check oil level.						
Battery	Check cables, connections and electrolyte level. Add distilled water as needed.						
Foot Pedals or Hand Controls and Steering	Check for correct operation. Repair or adjust as needed.						
Wheel Nuts	□ Check for loose wheel nuts and tighten to 105–115 ft.–lbs. (142–156 Nm) torque.						
Parking Brake	Check operation of the brake.						
Alternator Belt	Check tension and adjust as needed.						
Engine/Hydro. Drive Belt	* Check for wear or damage. Check idler arm stop.						
Fuel Filter	Replace filter element.						
Steering Shaft	Grease three fittings.						
Hydraulic Reservoir Breather Cap	Replace the reservoir breather cap.						
Hyd./Hydro. Filter	● Replace the filter element.						
Engine Oil and Filter	† Replace oil and filter. Use CD or better grade oil and Bobcat filter.						
Final Drive Trans.	Replace the oil in the chaincase.						
Hydraulic Reservoir	Clean or replace the fluid.						
Hydraulic Motors	Clean or replace the case drain filters.						
Bobcat Interlock Control System (BICS™)	Check lift arm by–pass control.						
Fan Drive Gearbox	Check gear lube level.						
Engine Valves	∞ Adjust the engine valves.						
Engine Timing Belt	◊ Replace the timing belt and belt tensioner assy.						

□ **Check wheel nut torque every 8 hours for the first 24 hours.**
● **Also replace hydraulic/hydrostatic filter element when the transmission warning light comes ON.**
■ **Or every 12 months.**
* **Inspect the new belt after first 50 hours.**
† **First oil and filter change must occur at 50 hours, 500 hours thereafter.**
∞ **After the first 500 hours on new engine, adjust engine valves; 1000 hours thereafter. (See Service Manual for procedure.)**
◊ **Or every 5 years.**

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BEFORE OPERATING THE BOBCAT LOADER

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 running the machine. Untrained operators can cause injury or death.

W-2001-1285

The Bobcat loader 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 this Manual.

IMPORTANT

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

I-2019-0284

SAFE OPERATION NEEDS A QUALIFIED OPERATOR *

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.

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

- **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 can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.
  - Operator Training Courses are available from your Bobcat dealer in English and Spanish. They provide information for safe and efficient equipment operation. Safety videos are also available.
  - Service Safety Training Courses are available from your Bobcat dealer. They provide information for safe and correct service procedures.
- **KNOW THE WORK CONDITIONS**
  - Know the weight of the materials being handled. Avoid exceeding the Rated Operating Capacity of the machine. 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 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 *SAFETY INSTRUCTIONS* Section of this manual.
  - Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, hearing protection or special applications kit are required for some work. See your dealer about Bobcat Safety equipment.

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

SI02-0400

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