

EN

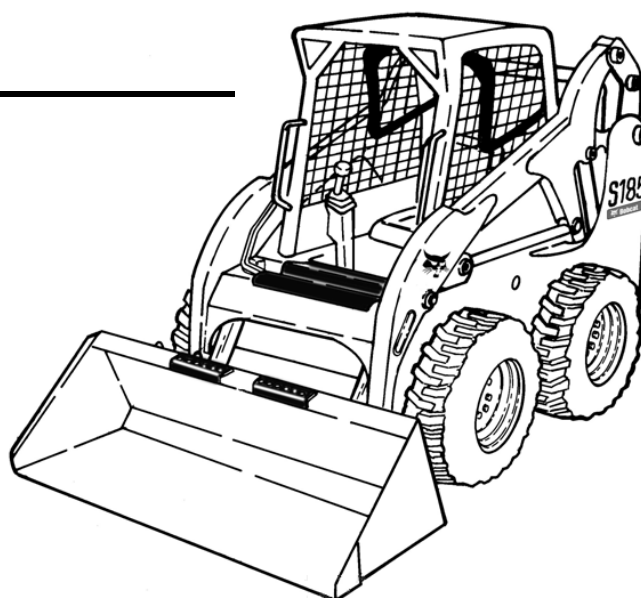
S185



Bobcat®

Operation & Maintenance Manual

S/N AEYU11001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

7168131-EN (08-08)



Printed in Europe

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OPERATOR SAFETY WARNINGS



WARNING

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

W-2001-1285



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

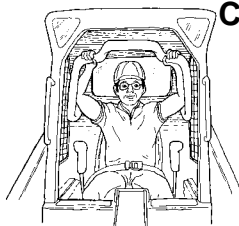
CORRECT



B-10731A

⚠ Never use the loader without instructions. See machine signs (decals), Operation & Maintenance Manual, and Operator's Handbook.

CORRECT



B-15570

⚠ Always use the seat bar and fasten seat belt snugly.
⚠ Always keep feet on the foot pedals or footrests when operating loader.

WRONG



B-15528

⚠ Never use loader without operator cab with ROPS and FOPS approval. Fasten your seat belt.

WRONG



B-15531

⚠ Never use loader as man lift or elevating device for personnel.

WRONG



B-15735

⚠ Do not use loader in atmosphere with explosive dust, explosive gas, or where exhaust can contact flammable material.

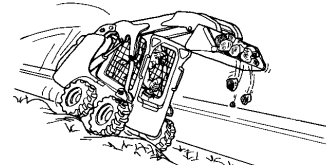
WRONG



B-15529

⚠ Never carry riders.
⚠ Keep bystanders away from work area.

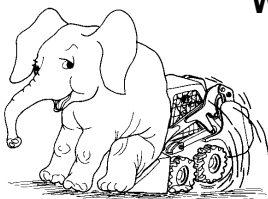
WRONG



B-15532

⚠ Always carry bucket or attachments as low as possible.
⚠ Do not travel or turn with lift arms up.
⚠ Load, unload, and turn on flat level ground.

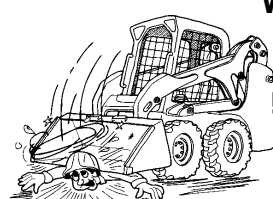
WRONG



B-15527

⚠ Never exceed Rated Operating Capacity.

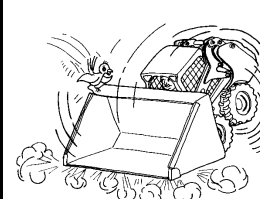
WRONG



B-15530

⚠ Never leave loader with engine running or with lift arms up.
⚠ To park, engage parking brake and put attachment flat on the ground.

WRONG



B-15533

⚠ Never modify equipment.
⚠ Use only attachments approved by Bobcat Company for this model loader.

SAFETY EQUIPMENT

The Bobcat Loader must be equipped with safety items necessary for each job. Ask your dealer about attachments and accessories.

1. SEAT BELT: Check belt fasteners and check for damaged webbing or buckle.
2. SEAT BAR: When up, it must lock the loader controls.
3. OPERATOR CAB (ROPS and FOPS): It must be on the loader with all fasteners tight.
4. HANDBOOK: Must be in the cab.
5. SAFETY SIGNS (DECALS): Replace if damaged.
6. SAFETY TREADS: Replace if damaged.
7. GRAB HANDLES: Replace if damaged.
8. LIFT ARM SUPPORT DEVICE: Replace if damaged.
9. PARKING BRAKE
10. BOBCAT INTERLOCK CONTROL SYSTEM (BICS)

OSW08-0805

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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 BOBCAT DEALER:

ADDRESS: _____

PHONE: _____



Bobcat Europe
Drève Richelle 167
B-1410 WATERLOO
Belgium

FOREWORD

SAFETY

**OPERATING
INSTRUCTIONS**

**PREVENTIVE
MAINTENANCE**

**SYSTEM SETUP
& ANALYSIS**

SPECIFICATIONS



Bobcat®

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 BOBCAT LOADER. If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your loader.

BOBCAT COMPANY IS ISO 9001:2000 CERTIFIED V

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- Engine Serial Number VII
- Loader Serial Number VII



Bobcat®

BOBCAT COMPANY IS ISO 9001:2000 CERTIFIED












ISO 9001:2000 is an international standard that controls the processes and procedures which we use to design, develop, manufacture and distribute Bobcat products.

British Standards Institute (**BSI**) is the Certified Registrar Bobcat Company chose to assess the Company's compliance with the ISO 9001:2000 standard. The BSI registration certifies that Bobcat's manufacturing facilities in Gwinner and Bismarck, North Dakota (North America), Pont-Château (France), Dobris (Czech Republic) and the Bobcat corporate offices (Gwinner, Bismarck & West Fargo) in North Dakota are in compliance with ISO 9001:2000. Only certified assessors, like BSI, can grant registrations.





















ISO 9001:2000 means that as a company we say what we do and do what we say. In other words, we have established procedures and policies, and we provide evidence that the procedures and policies are followed.

REGULAR MAINTENANCE ITEMS

 <p>ENGINE OIL FILTER (6 Pack) 6675517</p>	 <p>HYDROSTATIC FILTER 6661248</p>
 <p>FUEL FILTER 6667352</p>	 <p>HYDROSTATIC CASE DRAIN FILTERS 6661022</p>
 <p>AIR FILTER, Outer 6698057</p>  <p>AIR FILTER, Inner 6698058</p>	 <p>BATTERY 6674687</p>
 <p>HYDRAULIC CHARGE FILTER 6686926 (Earlier Models) 6692337 (Later Models)</p>	 <p>BREATHER CAP 6684923</p>

NOTE: Always verify Part Numbers with your Bobcat dealer.

LUBRICANTS AND FLUIDS

		All Bobcat Equipment							Only for TLS and AL	
		ENGINE 				HYDRAULIC/HYDROSTATIC 		ANTIFREEZE COOLANT 	AXLE TRANSMISSION 	BRAKE FLUID 
Packaging	Lineart	Bobcat Engine Power SAE 0W/30	Bobcat Engine Power SAE 10W/30	Bobcat Engine Power SAE 15W/40	Bobcat Engine Power SAE 20W/50	Bobcat Superior SH Hydraulic/Hydrostatic	Bobcat Bio Hydraulic Hydraulic/Hydrostatic	Bobcat PG Coolant 4 Seasons	Bobcat Axle Transmission Oil	Bobcat Brake Fluid LHM
										
5 L Can		6987500A	6904840A	6904841A	6987501A	6904842A	6904843A	6904844A	6904845A	6904846A
25 L Container		6987500B	6904840B	6904841B	6987501B	6904842B	6904843B	6904844B	6904845B	-
209 L Drum		6987500C	6904840C	6904841C	6987501C	6904842C	6904843C	6904844C	6904845C	-
1000 L Tank		6987500D	6904840D	6904841D	6987501D	6904842D	6904843D	6904844D	6904845D	-
400 gr Grease		Bobcat Multi-Purpose Grease				6903122				
		Bobcat Supreme HD Grease				6687884				
		Bobcat Extreme HP Grease				6687885				

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SERIAL NUMBER LOCATIONS

Always use the serial number of the loader 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.

Figure 1

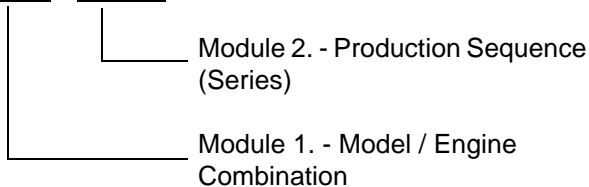


Loader Serial Number

The loader serial number plate [Figure 1] is located on the outside of the loader frame.

Explanation of loader Serial Number:

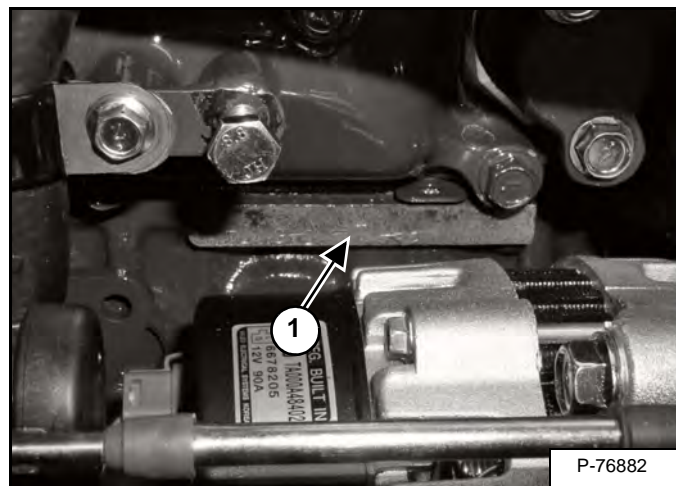
XXXX XXXXX



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

Engine Serial Number

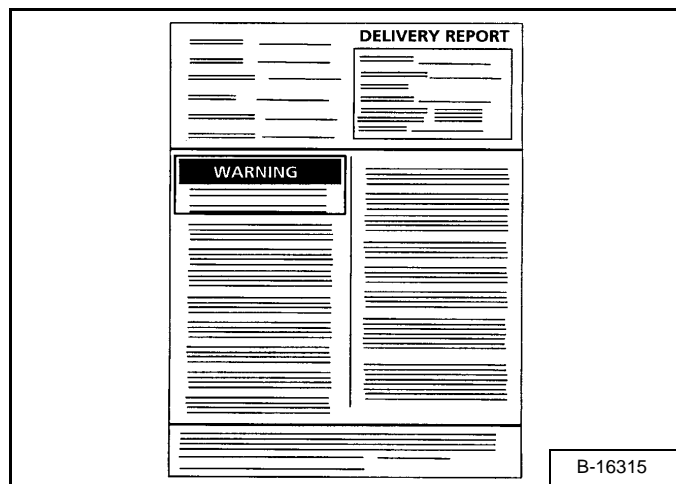
Figure 2



The engine serial number is located on the side of the engine (1) [Figure 2] above the alternator.

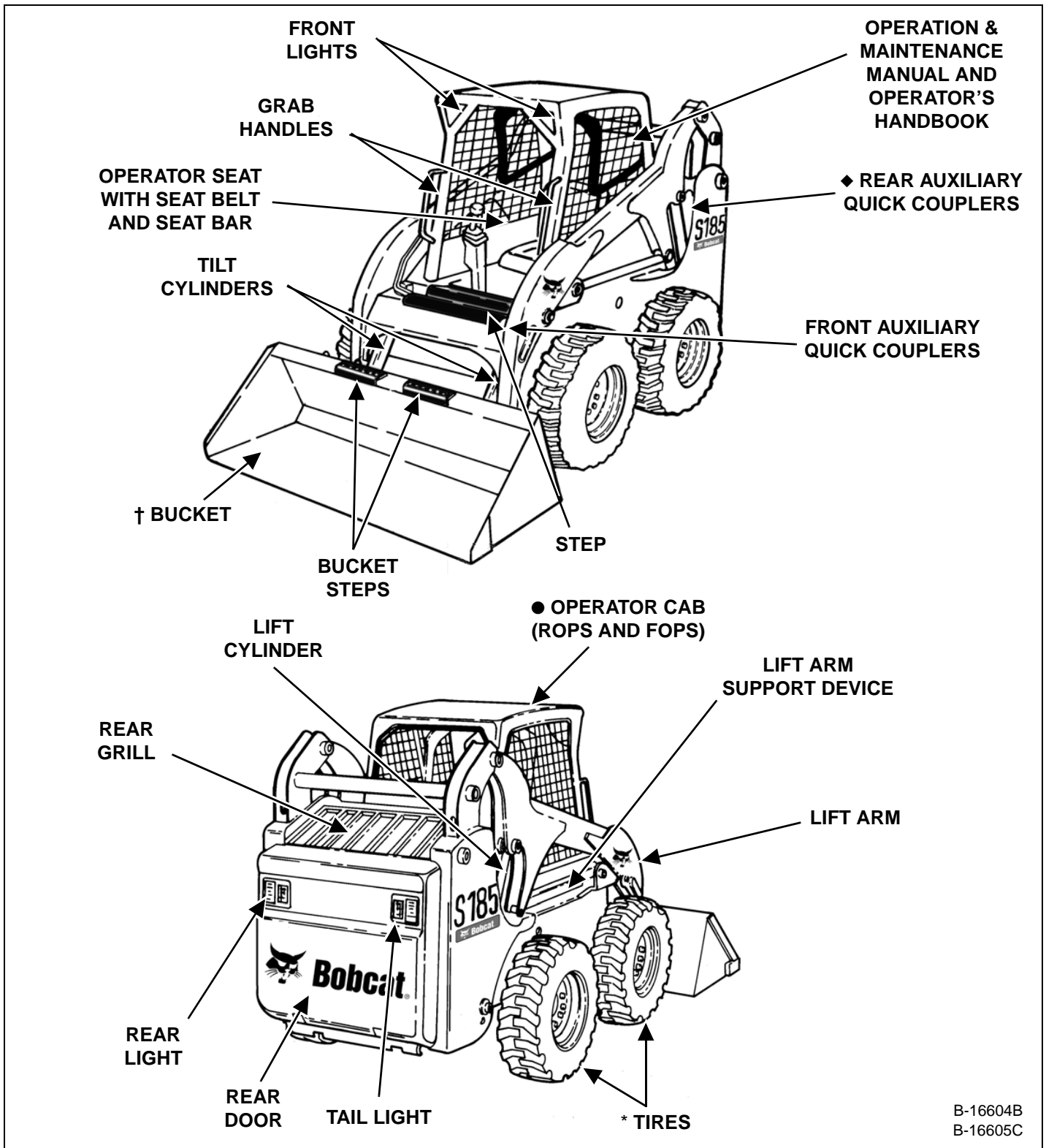
DELIVERY REPORT

Figure 3



The delivery report [Figure 3] must be filled out by the dealer and signed by the owner or operator when the Bobcat loader is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely.

LOADER IDENTIFICATION



B-16604B
B-16605C

◆ Optional or Field Accessory (Not Standard Equipment)

* TIRES - The Bobcat loader is factory equipped with standard tires.

† BUCKETS - Several different buckets and other attachments are available for the Bobcat loader.

● ROPS, FOPS - Roll Over Protective Structure, per ISO 3471, and Falling Object Protective Structure per ISO 3449, Level I. Level II is available. The Bobcat loader is base-equipped with a standard operator cab as shown. Extra insulated cab is available as an option (Reduced noise level).

FEATURES, ACCESSORIES AND ATTACHMENTS

Standard Items

Model S185 Bobcat loaders are equipped with the following standard items:

- 7-pin attachment control kit
- Attachment electrical control kit
- Automatically activated glow-plugs
- Auxiliary hydraulics: variable flow / maximum flow
- Bob-Tach™ frame
- Bobcat Interlock Control System (BICS)
- CE certification
- Deluxe operator cab*
Includes interior cab foam, side, top and rear windows, Deluxe wire harness, dome light, and electrical power port
- Electrically activated proportional front auxiliary hydraulics
- Engine / hydraulics system shutdown
- High-back cushion suspension seat
- Hydraulic bucket positioning (including ON / OFF switch)
- Instrumentation
- Lift arm support
- Operating lights, front and rear
- Parking brake
- Seat bar
- Seat belt
- Spark arrestor muffler
- Tyres - 10-16.5 - 10-ply - Bobcat heavy duty
- Warranty: 12 months or 2000 hours

* **Roll Over Protective Structure (ROPS)** - meets requirements of SAE-J1040 and ISO 3471; **Falling Object Protective Structure (FOPS)** - meets requirements of SAE-J1043 and ISO 3449, Level I

Options And Accessories

Below is a list of some equipment available from your Bobcat loader dealer as Dealer and / or Factory Installed Accessories and Factory Installed Options. See your Bobcat dealer for other available options and accessories.

- Dealer Installed Accessories
 - Air conditioning kit
 - Back up alarm kit
 - Cab enclosure kit
 - Counterweight kit
 - Deluxe instrument panel
 - Door sensor kit
 - FOPS kit**
 - Four-point lift kit
 - Fresh air heater kit
 - Front axle counterweight kit
 - Front door kit
 - Fuel cap locking kit
 - Operator cab, CE, enclosure kit
 - Plumbing kit for fresh air heater
 - Power Bob-Tach™ kit
 - Rear auxiliary hydraulic kit
 - Replacement Bob-Tach™
 - Replacement operator cab structure
 - Single-point lift kit
 - Special applications kit
- Factory Options
 - Advanced Control System (ACS)
 - Advanced Hand Controls (AHC)
 - Air conditioning
 - Cab enclosure with heat
 - Deluxe instrument panel
 - Heavy duty tyres with offset rims - 10-16.5 - 10-ply
 - Heavy Duty Wide Flotation tyres - 31 x 12-16.5 - 10-ply
 - Power Bob-Tach™
 - Selectable Joystick Controls (SJC)
 - Severe duty poly-filled tyres - 10-16.5 - 10-ply
 - Severe duty tyres - 10-16.5 - 10-ply
 - Two speed

** **Falling Objects Protective Structure (FOPS)** - meets requirements of SAE-J1043 and ISO 3449, Level II

Specifications subject to change without notice.

FEATURES, ACCESSORIES AND ATTACHMENTS (CONT'D)

These and other attachments are approved for use on this model loader. Do not use unapproved attachments. Attachments not manufactured by Bobcat may not be approved.

The versatile Bobcat loader quickly turns into a multi-job machine with a tight-fit attachment hook-up . . . from bucket to grapple to pallet fork to backhoe and a variety of other attachments.

See your Bobcat dealer for information about approved attachments and attachment Operation & Maintenance Manuals.

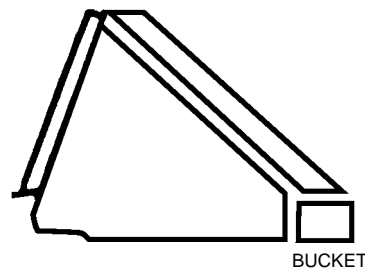
Increase the versatility of your Bobcat loader with a variety of bucket styles and sizes.

Attachments

For specific model availability, see Bobcat Product Price List.

- Angle blade
- Angle broom*†
- Auger
- Backhoe
- Box blade
- Brushcat rotary cutter
- Buckets
- Chipper*
- Combination bucket
- Concrete pump*
- Cutter crusher*
- Digger
- Dozer blade*
- Dumping hopper
- Farm grapple
- Grader*
- Hydraulic breaker**
- Industrial grapple
- Landplane
- Landscape rake
- Mixing bucket*
- Pallet fork - hydraulic
- Pallet fork - standard
- Planer*
- Rear stabiliser
- Scarifier
- Snow blower*
- Sod layer*
- Soil conditioner*
- Spreader
- Stump grinder*
- Super scraper
- Sweeper
- Three-point hitch
- Tiller
- Tilt-Tatch™
- Tracks, steel

Buckets Available



Many bucket styles, widths and different capacities are available for a variety of different applications. They include Construction & Industrial, Low Profile, Fertilizer and Snow, to name a few. See your Bobcat dealer for the correct bucket for your Bobcat loader and application.

- Tree transplanter*
- Trench compactor
- Trencher
- Utility forks
- Vibratory roller
- Water kit
- Wheel saw
- Whisker broom

* Attachment control kit required.

** When operating the loader with this attachment, a Special Applications Kit, which includes a 12 mm Lexan front door with 6 mm top and rear windows, must be used.

† Optional water kit.

High-Flow Attachments

The following attachments are approved for use on High-Flow machines. See your Bobcat dealer for an updated list of approved attachments.

- Chipper
- Flail Cutter
- Planer
- Rotary Cutter (Brushcat™)
- Snowblower
- Soil Conditioner
- Tiller
- Trencher
- Wheel Saw

FEATURES, ACCESSORIES AND ATTACHMENTS (CONT'D)

Special Applications Kit

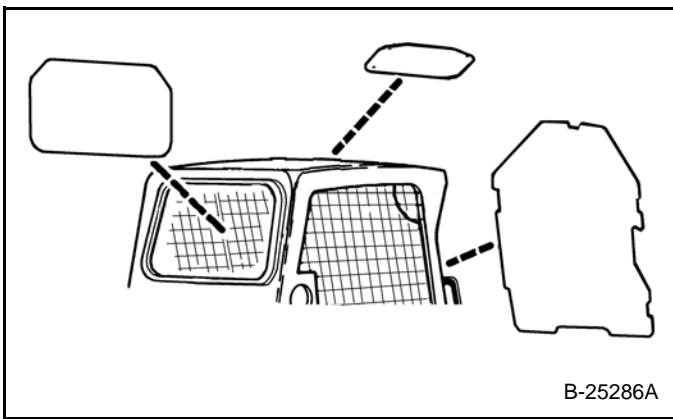
WARNING

AVOID INJURY OR DEATH

Some attachment applications can cause flying debris or objects to enter front, top or rear cab openings. Install the Special Applications Kit to provide added operator protection in these applications.

W-2737-0508

Figure 4



Available for special applications to restrict material from entering cab openings. Kit includes 12 mm thick polycarbonate front door, top and rear windows [Figure 4].

See your Bobcat dealer for availability.

Special Applications Kit Inspection And Maintenance

- Inspect for cracks or damage. Replace if required.
- Pre-rinse with water to remove gritty materials.
- Wash with a mild household detergent and warm water.
- Use a sponge or soft cloth. Rinse well with water and dry with a clean soft cloth or rubber squeegee.
- Do not use abrasive or highly alkaline cleaners.
- Do not clean with metal blades or scrapers.



Bobcat®

SAFETY

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SAFETY



Bobcat®

SAFETY INSTRUCTIONS

Before Operation

Carefully follow the operating and maintenance instructions in this manual.

The Bobcat loader is highly maneuverable and compact. It is rugged and useful under a wide variety of conditions. This presents an operator with hazards associated with off highway, rough terrain applications, common with Bobcat loader usage.

The Bobcat loader has an internal combustion engine with resultant heat and exhaust. All exhaust gases can kill or cause illness so use the Loader with adequate ventilation.

The dealer explains the capabilities and restrictions of the Bobcat loader and attachment for each application. The dealer demonstrates the safe operation according to Bobcat instructional materials, which are also available to operators. The dealer can also identify unsafe modifications or use of unapproved attachments. The attachments and buckets are designed for a Rated Operating Capacity (some have restricted lift heights). They are designed for secure fastening to the Bobcat loader. The user must check with the dealer, or Bobcat literature, to determine safe loads of materials of specified densities for the machine - attachment combination.

The following publications and training materials 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 and attachment is in safe operating condition.
- The Operation & Maintenance Manual delivered with the machine or attachment gives 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 is fastened to the operator cab of the loader. 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 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.

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SAFETY INSTRUCTIONS (CONT'D)

Safe Operation Is The Operator's Responsibility



Safety Alert Symbol

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



WARNING

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

W-2001-1285

IMPORTANT

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

I-2019-0284



DANGER

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

D-1002-1107



WARNING

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

W-2044-1107

The Bobcat 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 the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

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

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 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 emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation

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

Know the Work Conditions

- Know the weight of the materials being handled. Never exceed 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 the load if handling dense material.
- The operator must know any prohibited uses or work areas, for example, he or she needs to know about excessive slopes.
- Know the location of any underground lines. Call local utilities.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, respiratory equipment, hearing protection or Special Applications Kits are required for some work. See your Bobcat dealer about Bobcat Safety Equipment for your model.

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SAFETY INSTRUCTIONS (CONT'D)

Avoid Silica Dust



Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica 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.

SI SSL-0208

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).

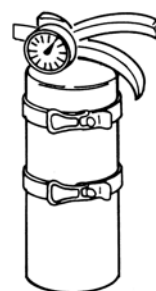
Welding And Grinding

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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