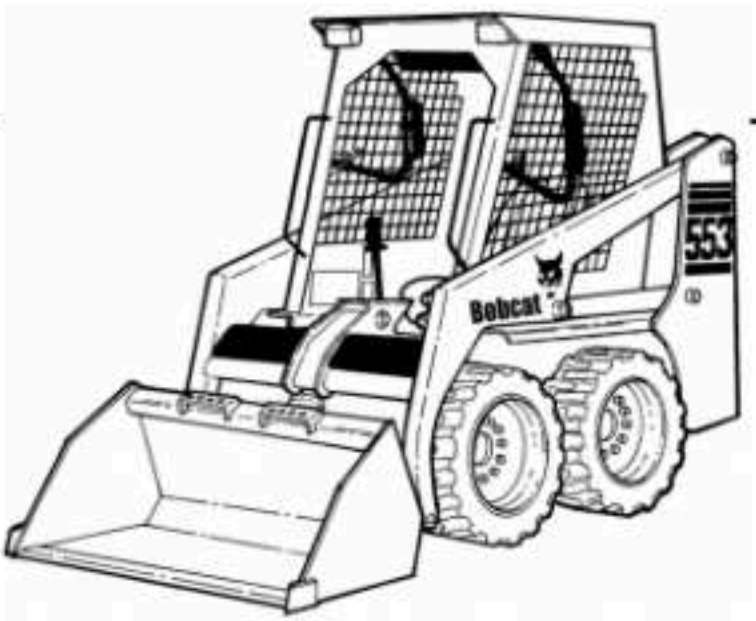
553

Bobcat®

Operation & Maintenance Manual

S/N 520311001 & Above
S/N 520411001 & Above



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS™)

6901823 (3-04) Revised (1-05) (S)

An Ingersoll Rand business

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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 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 Machine Name. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR Bobcat loader. If you have any questions, see your Bobcat dealer.

BOBCAT COMPANY IS ISO 9001:2000 CERTIFIED V

BOBCAT LOADER IDENTIFICATION. VIII

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HYDRAULIC CONTROLS

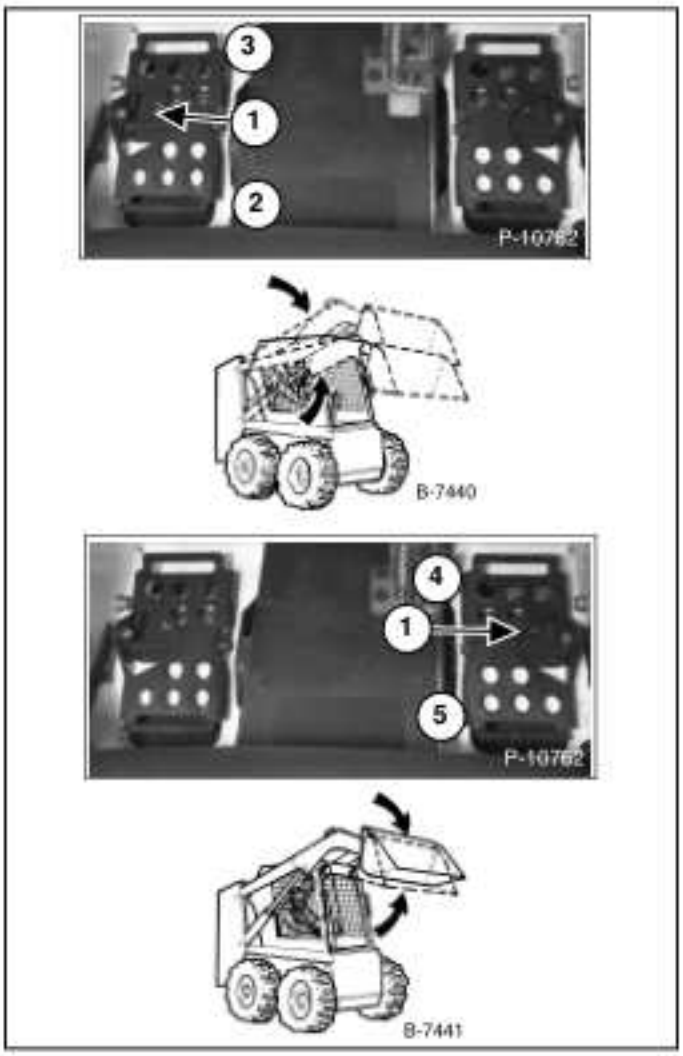
Foot Pedals

⚠ WARNING

Keep both feet on pedals while operating machine. Failure to do so can cause serious injury.

W-2002-1285

Figure OI-16



Put your feet on the pedals and KEEP THEM THERE any time you operate the loader.

Two foot pedals (Item 1) **[Figure OI-16]** control the hydraulic cylinders for the lift and tilt functions.

Lift Arm Operation

The left pedal controls the lift arms. Push the bottom (heel) of the pedal (Item 2) **[Figure OI-16]** to raise the lift arm.

Push on the top (toe) of the pedal (Item 3) **[Figure OI-16]** to lower the lift arms.

Lift Arm Float Position

Push the top (toe) of the pedal (Item 3) **[Figure OI-16]** all the way forward until it locks into *float* position.

Use the float position of the lift arms to level loose material while driving backward.

Push the bottom (heel) to unlock from the float position.

Tilt Operation

The right pedal controls the movement of the bucket.

Push the top (toe) of the pedal (Item 4) **[Figure OI-16]** to tilt the bucket forward.

Push the bottom (heel) of the pedal (Item 5) **[Figure OI-16]** to tilt the bucket backward.

Bucket Position Valve Operation (If Equipped)

The function of the bucket position valve is to keep the bucket in the same approximate position it is placed in before beginning the upward lift cycle.

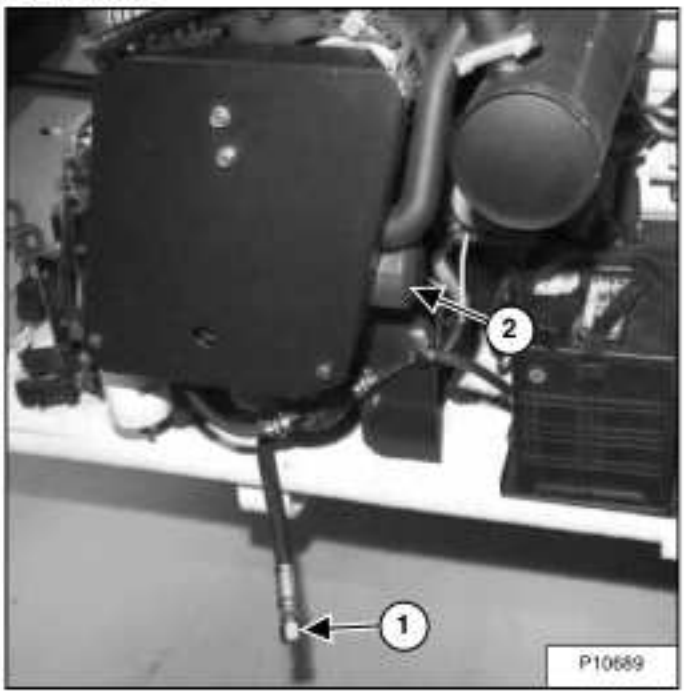
Bucket positioning functions automatically during the upward lift cycle only.

The bucket positioning function can be turned OFF with the bucket level switch. (See Left, Right And Accessory Panels on Page OI-3).

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Replacing The Oil And Filter

Figure PM-31



Follow the service interval for replacing the engine oil and filter (See SERVICE SCHEDULE on Page PM-5).

Run the engine until it is at operating temperature. Stop the engine.

Open the rear door.

Remove the cap (Item 1) **[Figure PM-31]**, from the end of the hose and drain the oil into a container. Dispose of used oil in an environmentally safe manner.

Remove the filter (Item 2) **[Figure PM-31]**.

Clean the filter housing surface.

Put clean oil on the gasket of the new filter. Install the filter and hand tighten.

Install the cap on the drain hose.

Figure PM-32



Remove the oil fill cap (Item 1) **[Figure PM-32]**.

Use a good quality motor oil that meets API Service Classification of CD or better (See Oil Chart on Page PM-19).

Fill to capacity. (See Capacities on Page SPEC-6).

Start the engine and let it run for about 5 minutes. Check for leaks at the filter. Check the oil level. Add oil until the level is at the FULL mark on the dipstick.

Install the oil fill cap (Item 1) **[Figure PM-32]**.

NOTE: DO NOT overfill the crankcase.

Record the operating hours of the loader on the decal inside the rear door.

Close the rear door before operating the loader.

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LOADER SPECIFICATIONS (CONT'D)

Performance

Rated Operating Capacity (SAE)	950 lbs. (431 kg)
Tipping Load (SAE Rating)	1930 lbs. (875 kg)
Operating Weight (SAE)	3704 lbs. (1680 kg)
SAE Breakout Force-Lift	1950 lbf. (8674 kg)
-Tilt	1800 lbf. (8006 kg)
Axle Torque	2650 ft.-lbs. (3593 Nm)

Controls

Vehicle Steering	Direction and Speed controlled by two hand levers.
Loader Hydraulics - Lift and Tilt	Controlled by separate foot pedals.
Front Auxiliary (Opt.)	Controlled by lateral movement of RH steering lever.
Engine	Hand lever throttle; Key-Type starter switch & shutdown.
Starting Aid	Glow Plugs - Rocker switch activated.
Service Brake	Two independent hydrostatic systems controlled by two hand operated steering levers.
Parking Brake (Std)	Mechanical Disc, foot operted pedal (Early Models); electric switch (Later Models) in instrument panel.

Engine

Make/Model	Kubota/D1105-EB
Fuel/Cooling	Diesel/Liquid
Horsepower (SAE)	25.0 HP (18,6 kW)
Maximum Governed RPM	3000 RPM
Torque @ 2100 RPM (SAE)	52 ft.-lbs. (70,5 Nm)
Number of Cylinders	Three
Displacement	68.5 cu. in. (1,1 L)
Bore/Stroke	3.07/3.09 (78/78,5)
Lubrication	Pressure System with Filter
Crankcase Ventilation	Open
Air Cleaner	Dry replaceable paper cartridge with safety element
Ignition	Compression Diesel
Engine Coolant	Propylene glycol/water mixture (53% PG/47% water)
Staring Aid	Glow Plugs

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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

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

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, 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.

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.
- 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 (R.O.C.) 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 or the TOLL FREE phone number found in the **Before Operation** Section of this manual.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, hearing protection or Special Applications Kits are required for some work. See your Bobcat dealer about Bobcat Safety Equipment for your model.

SI SSL-0604

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