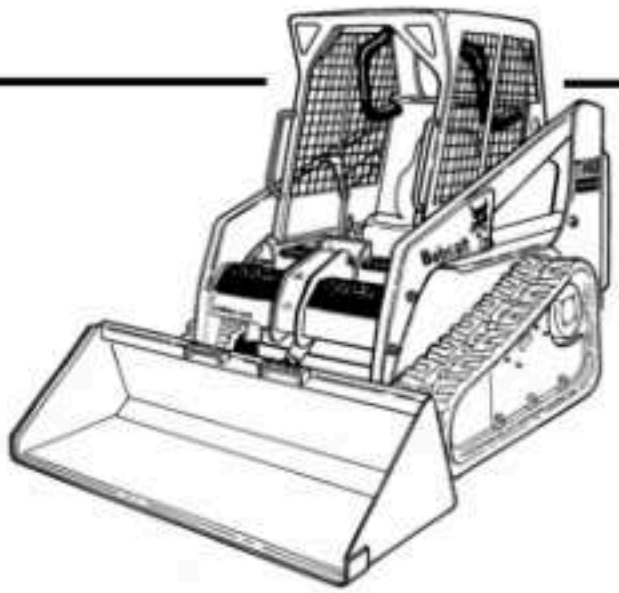
# T140

# Bobcat®

# Operation & Maintenance Manual

S/N 527111001 & Above
S/N 527211001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS)

6903138 (6-05)

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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 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.

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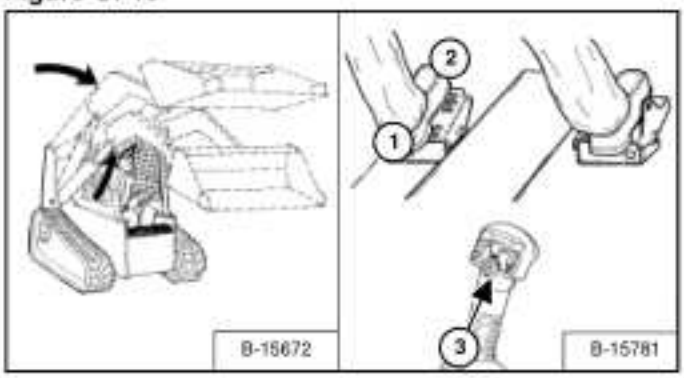
## HYDRAULIC CONTROLS

### Operation

Two foot pedals (or optional hand controls) control the hydraulic cylinders for the lift and tilt functions.

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

**Figure OI-16**




### Standard Controls (Also ACS in Foot Pedal Mode)

*Lift Arm Operation* - (Left Pedal)

Push the heel (Item 1) **[Figure OI-16]** of the pedal to raise the lift arms.

Push the toe (Item 2) **[Figure OI-16]** of the pedal to lower the lift arms.

*Lift Arm Float Position* - (Left Pedal)

Push the toe (Item 2) **[Figure OI-16]** of the pedal all the way forward until it locks into the float position.

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

Raise the lift arms to disengage the float position.

*Lift Arm Float Position (With ACS)* - (Left Pedal)

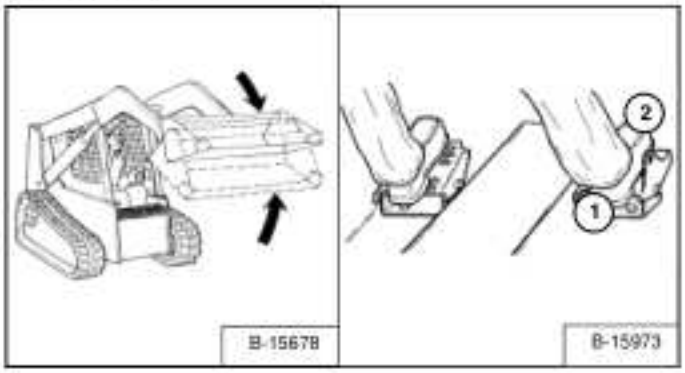
Press and hold the Float button (Item 3) **[Figure OI-16]**.

Push the toe (Item 2) **[Figure OI-16]** of the pedal forward to lower the lift arms. Then release the float button.

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

Raise the lift arms to disengage the float position.

**Figure OI-17**




*Tilt Operation* - (Right Pedal)

Push the heel (Item 1) **[Figure OI-17]** of the pedal to tilt the bucket backward.

Push the toe (Item 2) **[Figure OI-17]** of the pedal to tilt the bucket forward.



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Figure PM-54




Remove the filter (Item 1) **[Figure PM-54]**.

Clean the surface of the filter housing where the filter seal contacts the housing.

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

**⚠ 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 of 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**

Start the engine and operate the loader hydraulic controls.

Stop the engine and check for leaks at the filter.

Check the fluid level in the reservoir and add as needed.

Close the rear door.

**⚠ WARNING**

**Always clean up spilled fuel or oil. Keep heat, flames, sparks or lighted tobacco away from fuel and oil. Failure to use care around combustibles can cause explosion or fire which can result in injury or death.**

**W-2103-1285**



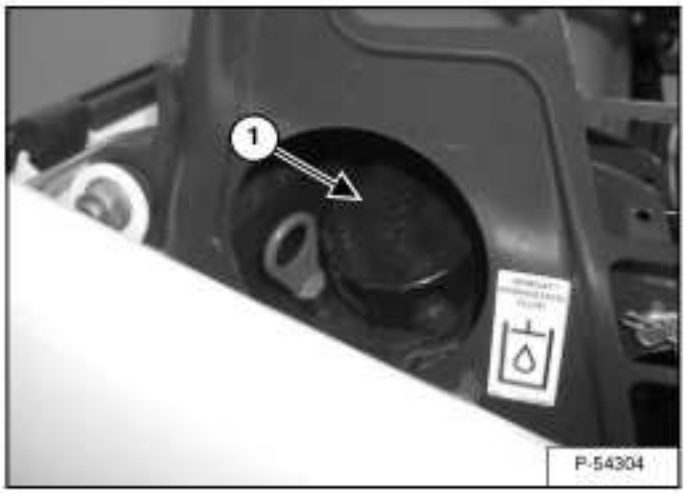
**Replacing Hydraulic Fluid and Case Drain Filters**

See your SERVICE SCHEDULE for the correct service interval. (See SERVICE SCHEDULE on Page PM-7.)

Replace the fluid if it becomes contaminated or after major repair.

Always replace the hydraulic / hydrostatic filter and the case drain filters whenever the hydraulic fluid is replaced. (See Replacing Hydraulic/Hydrostatic Filter on Page PM-33.)

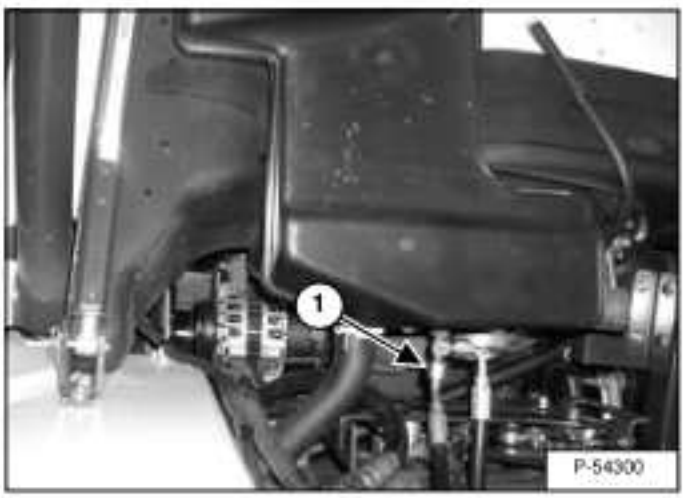
Figure PM-55




Remove the fill cap (Item 1) **[Figure PM-55]**.

Raise the operator cab. (See Raising The Operator Cab on Page PM-10.)

Figure PM-56




Disconnect the hose (Item 1) **[Figure PM-56]** from the hydraulic reservoir and drain the fluid into a container.



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## LOADER SPECIFICATIONS (T140) (CONT'D)

### Performance

| | |
|---|---|
| Rated Operating Capacity (ISO) | 1400 lb. (635 kg) |
| Tipping Load (ISO) | 4134 lb. (1875 kg) |
| Operating Weight | 6424 lb. (2914 kg) |
| SAE Breakout Force - Lift<br>- Tilt | 2300 lb. (10231 N)<br>3125 lb. (13901 N) |
| Travel Speed | 0-7.3 mph (11,7 km/hr.) |

### Controls

| | |
|---|---|
| Vehicle Steering | Direction and speed controlled by two hand levers. |
| Loader Hydraulics<br>Lift and Tilt<br>Front Auxiliary (Std.)<br>Rear Auxiliary (Option) | <br>Controlled by separate foot pedals *or* Advanced Control System (ACS) (Opt)<br>Controlled by electrical switch on RH steering lever.<br>Controlled by electrical switch on LH steering lever. |
| Engine | Hand lever throttle. Key-type starter switch and shutdown. |
| Starting Aid | Glow Plug-Automatically activated by Standard or Deluxe instrumentation. |
| Auxiliary Pressure Release | Automatically released at Quick Coupler block. |
| Service Brake | Two independent hydrostatic systems controlled by two hand operated steering levers. |
| Secondary Brake | One of the hydrostatic transmissions. |
| Parking Brake (Std.) | Mechanical disc, hand operated rocker switch on center instrument panel. |

### Engine

| | |
|---|---|
| Make / Model | KUBOTA V2203-M-DI-E2B-BC-3 |
| Fuel / Cooling | Diesel / Liquid |
| Horsepower @ 2800 RPM (SAE) | **Net:** 46 HP (34,3 kW) **Gross:** 49.0 HP (36.5 kW) |
| Torque @ 1700 RPM (SAE) | **Net:** 104 ft.-lb. (141 N•m) **Gross:** 111 ft.-lb. (150 N•m) |
| Number of Cylinders | Four |
| Displacement | 134.0 cu. in. (2195 cu. cm.) |
| Bore / Stroke | 3.425 / 3.638 (87,0 / 92,4) |
| Lubrication | Gear Pump Pressure System W/Filter |
| Crankcase Ventilation | Closed |
| Air Cleaner | Dry replaceable cartridge w/separate safety element |
| Ignition | Diesel-Compression |
| Low Idle | 1175-1225 RPM |
| High Idle | 2860-3000 RPM |



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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 (ROC) 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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