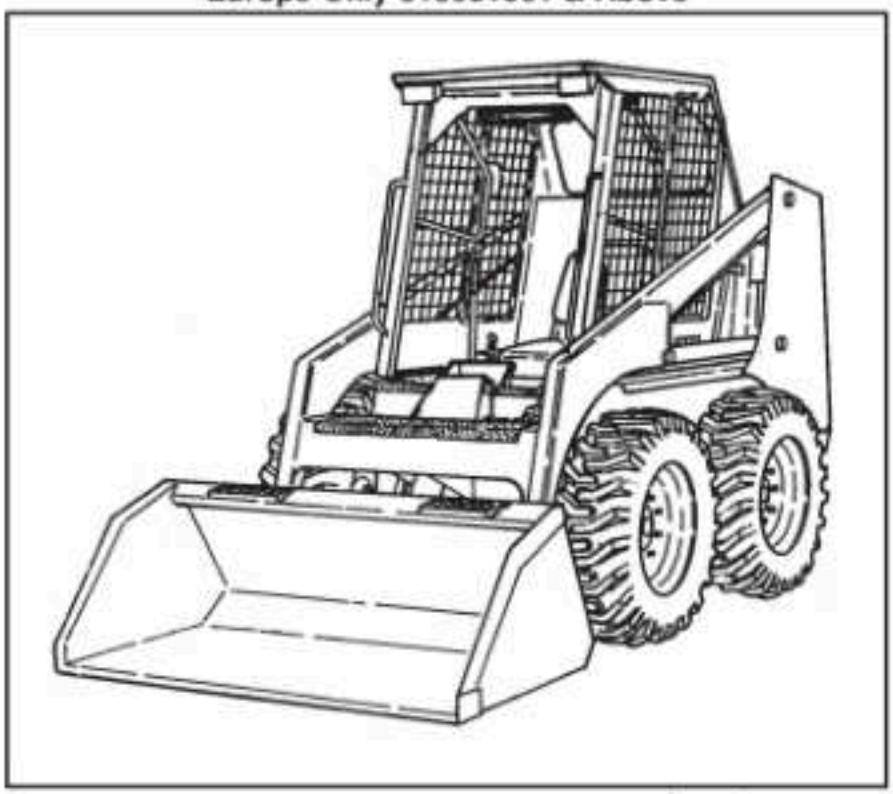
553

Operation & Maintenance Manual

(S/N 513011001 & Above)

Europe Only 513031001 & Above



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS™)

MELROE
INGERSOLL-RAND
6724696 (1-97) Revised (10-98) Printed in U.S.A.

bobcat

© Melroe Company 1998

MidWestTech | Bobcat 553 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD iii
SAFETY ix
OPERATING INSTRUCTIONS 1
PREVENTIVE MAINTENANCE 27
SYSTEMS ANALYSIS 57
MACHINE SIGN TRANSLATIONS 63
SPECIFICATIONS 71

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: _____

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

Melroe Europe
J. Huysmanslaan 59
B–1651 LOT
BELGIUM

MidWestTech | Bobcat 553 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

HYDRAULIC CONTROLS

Foot Pedals

⚠ WARNING

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

W-2002-1285

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

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

- **Lift Arm Operation**

  The *left pedal* controls the lift arms. Push on the bottom (heel) (Item 2) **[A]** of the pedal to raise the lift arms.

  Push on the top (toe) (Item 3) **[A]** of the pedal to lower the lift arms.

- **Lift Arm Float Position**

  Push the top (toe) (Item 3) **[A]** of the pedal all the way forward until it locks into float position *(detent)*.

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

- **Tilt Operation**

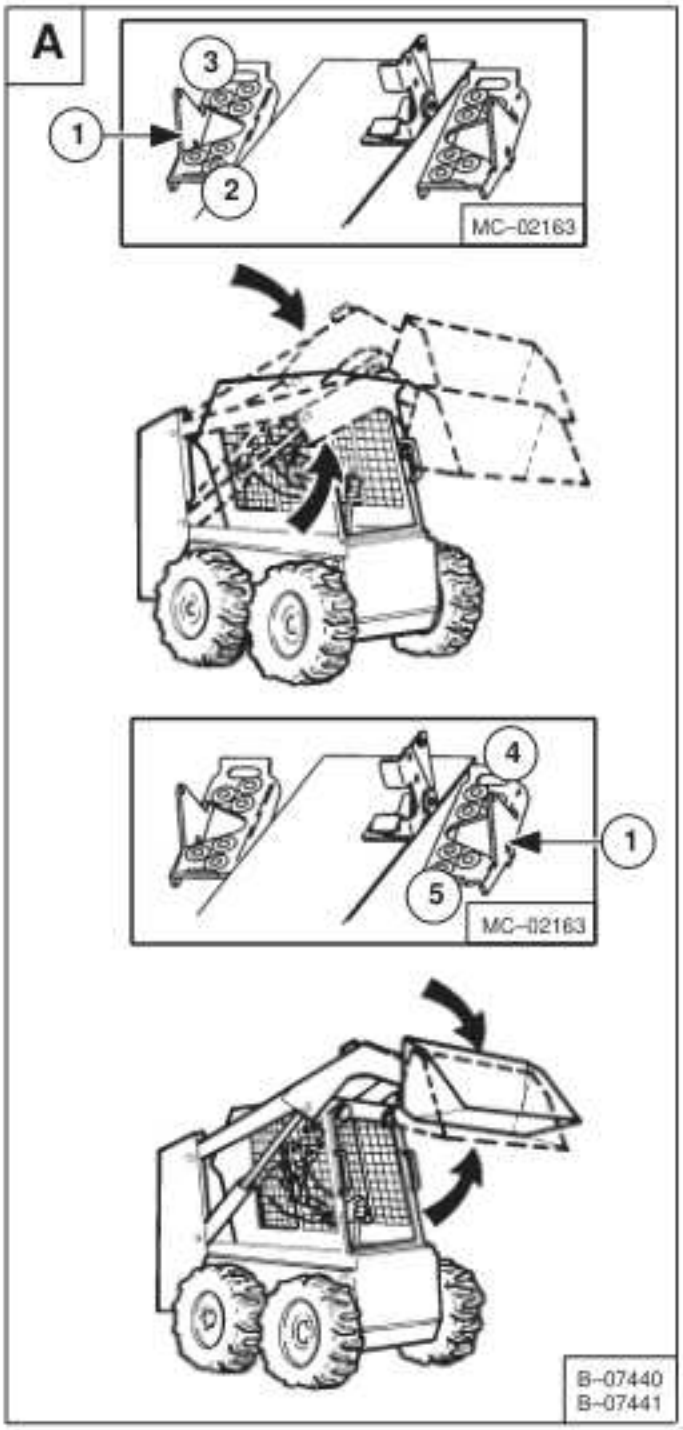
  The *right pedal* controls the action of the bucket. Push the top (toe) (Item 4) **[A]** of the pedal to tilt the bucket forward.

  Push the bottom of the pedal (heel) (Item 5) **[A]** to tilt the bucket backward.

Bucket Position Valve Operation (Option or Field Accessory)

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

Bucket positioning functions during the upward lift cycle only.



MidWestTech | Bobcat 553 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

⚠ WARNING

Never use attachments or buckets which are not approved by Melroe 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 Melroe 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 the *SPECIFICATIONS* Section in this manual.)

It 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.

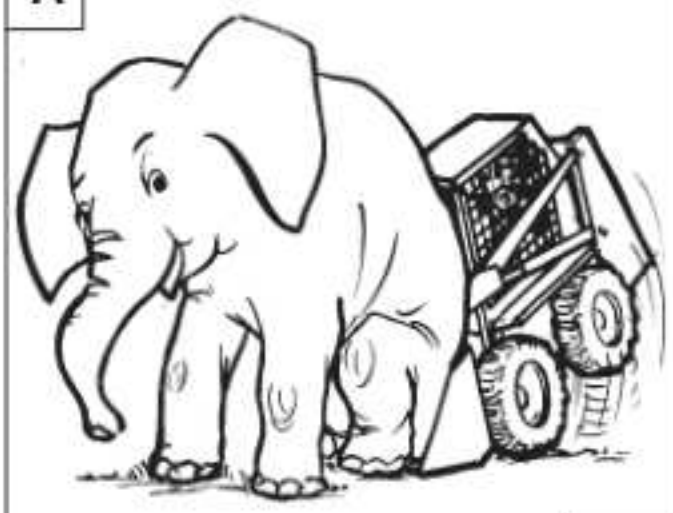
Exceeding the Rated Operating Capacity can cause the following problems **[A]**:

1. Steering the loader may be difficult.
2. Tires may wear faster.
3. There will be a loss of stability.
4. 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 loads to be carried when using a pallet fork are shown in figure **[B]**. See your Bobcat loader dealer for more information about pallet forks and other available attachments.

A



B–08587

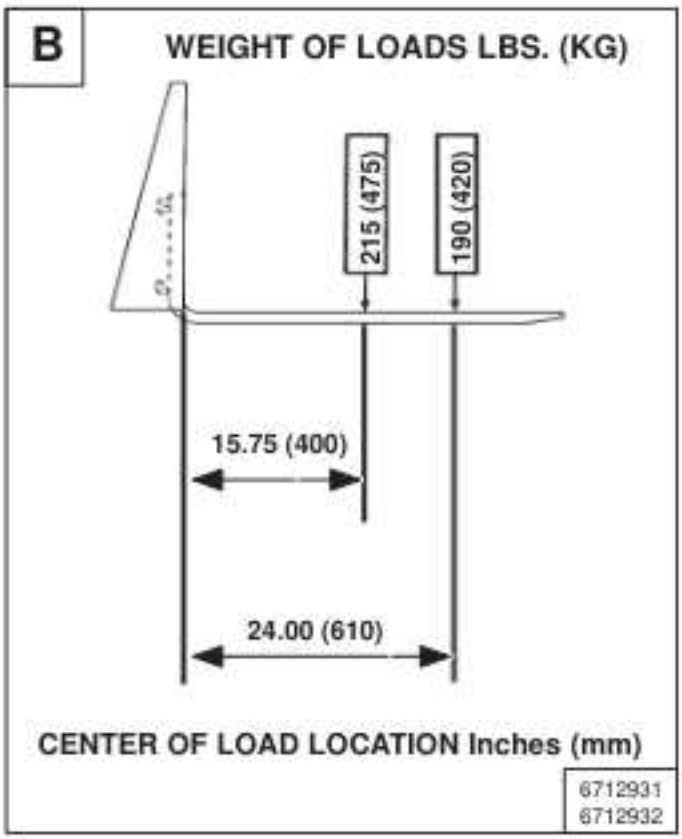
⚠ WARNING

AVOID INJURY OR DEATH

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

W–2053–0887

B



6712931
6712932

MidWestTech | Bobcat 553 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

Replacing the Hydraulic/Hydrostatic Filter

See the *SERVICE SCHEDULE* in this manual for the correct service interval to replace the filter.

Stop the engine. Open the rear door.

Clean the area around the filter housing.

Remove the filter element (Item 1) **[A]**.

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

Lubricate the rubber gasket with grease.

Install the filter element and hand tighten.

Operate the loader and check for leaks at the filter.

Check fluid level in the reservoir and add as needed.

Replacing Hydraulic Fluid

See the *SERVICE SCHEDULE* in this manual for the service interval to replace the fluid. The fluid must also be replaced if it becomes contaminated and after any major repairs.

Remove the filler cap from the reservoir **[B]**.

Remove the screen from the fill pipe **[C]**.

Remove fluid from the hydraulic reservoir.

Wash the screen in clean solvent. Install the screen in the fill pipe.

Remove the filter element and install a new filter element. Add hydraulic/hydrostatic fluid to the reservoir. (See *SPECIFICATIONS* in this manual for the correct fluid.) DO NOT fill above the sight glass.

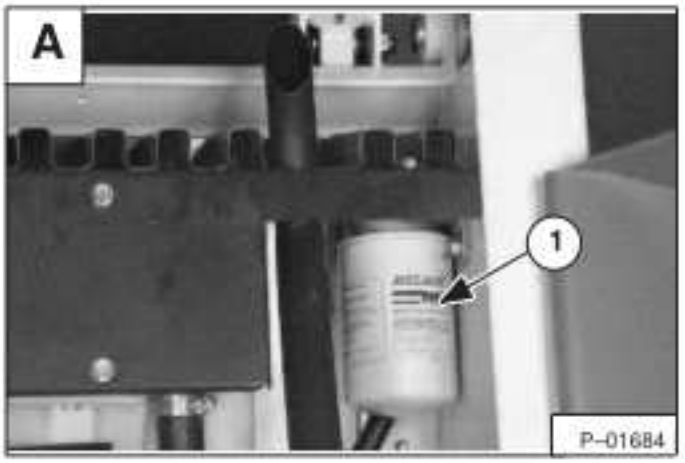
Operate the loader. Stop the engine. Check the fluid level and add as needed.

⚠ WARNING

AVOID INJURY OR DEATH

Never service or adjust the machine when the engine is running unless instructed to do so in the manual.

W-2012-0497







MidWestTech | Bobcat 553 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

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



B–10731

The Bobcat loader must be in good operating condition before use.

Check all of the items on the Service Schedule under the 8–10 hour column or as shown in this Manual.

⚠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

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 Melroe Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, EMI 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 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 demostration and verbal instruction. This training is given by your dealer before the loader is delivered.
  - The new operator must start in an area without bystanders and use all the controls until he can operate the loader safely under all conditions of the work area. Always fasten seat belt and lower seat bar before operating.
  - The Skid Steer Loader Operator Training Course is available in English and Spanish. The course provides information for safe and efficient operation. See your dealer for availability.
- KNOW THE WORK CONDITIONS
  - For each material to be handled, the operator must know how to avoid exceeding the rated operating capacity of the loader. For example, in handling certain loose material with a given bucket, he must know whether he can safely take a full load, or only part of a bucket load.
  - 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 maintaining or servicing loader. Safety glasses, hearing protection or loader special applications kit are required for some work. See your dealer about Melroe 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.

SI02–0598

MidWestTech | Bobcat 553 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >