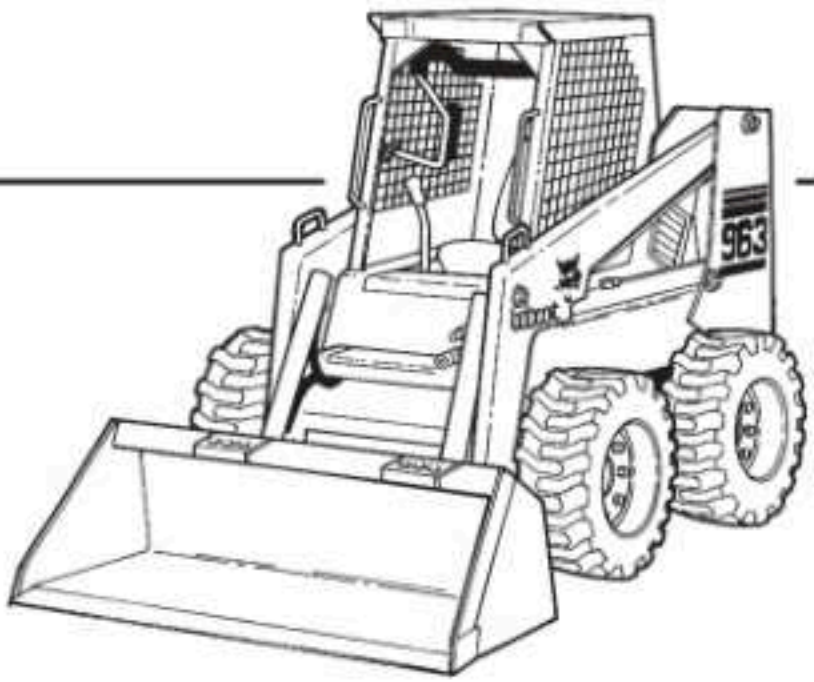
963

Operation & Maintenance Manual



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

MELROE
INGERSOLL-RAND

6724543 (10-97) Revised (7-98)

Printed in U.S.A.

bobcat

© Melroe Company 1998

MidWestTech | Bobcat 963 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 37
SYSTEMS ANALYSIS 69
MACHINE SIGN TRANSLATIONS 79
SPECIFICATIONS 85

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 963 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.

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

Push the bottom (heel) of the lift pedal to unlock from the *float* position.

Tilt Operation (Bucket)

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.

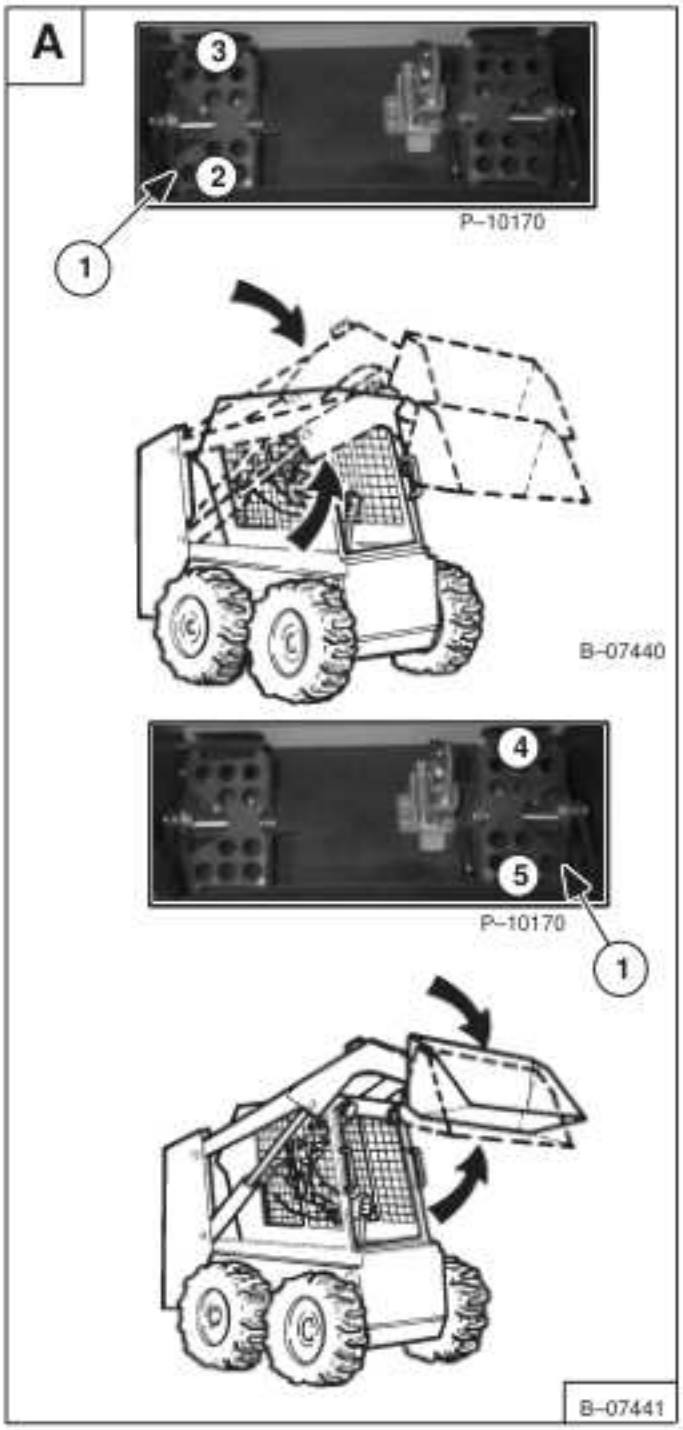
NOTE: Keep the foot pedal area clean of dirt and debris that could interfere with pedal operation. Open the cover (Item 1) [B]. Push the dirt or debris out the front of the loader frame, Install the covers.

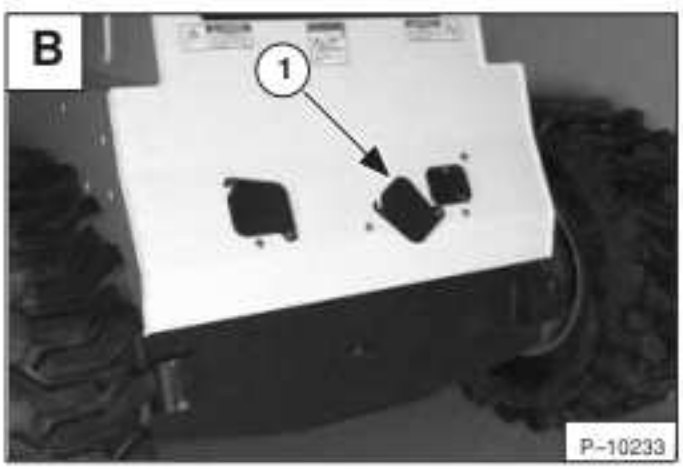
Bucket Position Valve

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 position functions automatically during the upward lift cycle only.

The bucket positioning function can be turned OFF with the bucket level switch. (See Page 3 & 4.)





MidWestTech | Bobcat 963 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

ATTACHMENTS AND BUCKETS

⚠ 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. (Also see *SPECIFICATIONS* Page 85.) 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 and load center moves forward and reduces the rated operating capacity. If very dense material is loaded, the volume must be reduced.

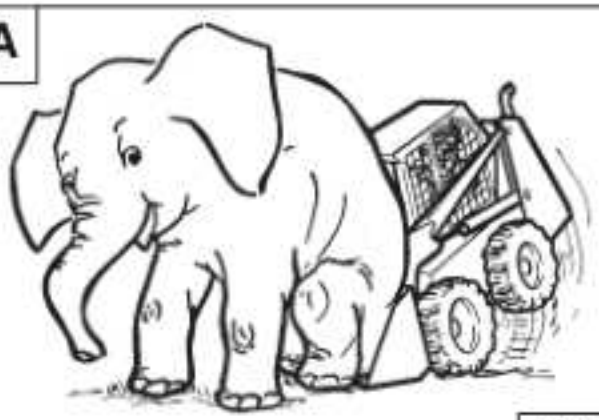
Exceeding the rated operating capacity **[A]** can cause the following problems:

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

A



B-07495

⚠ WARNING

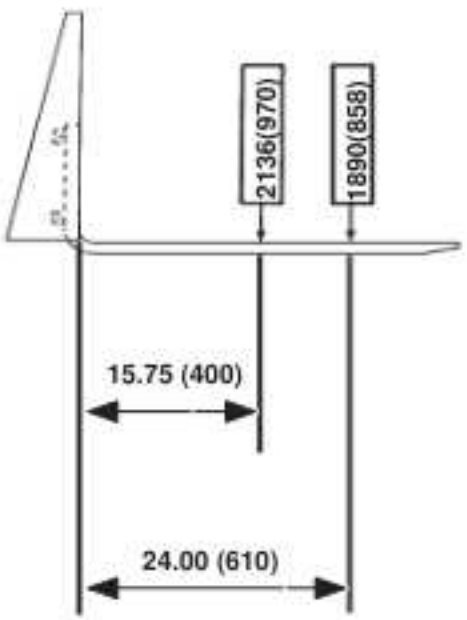
AVOID INJURY OR DEATH

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

W–2053–0887

B

WEIGHT OF LOADS LBS. (KG)



CENTER OF LOAD LOCATION Inches (mm)

6713662

MidWestTech | Bobcat 963 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

LUBRICATING THE BOBCAT LOADER

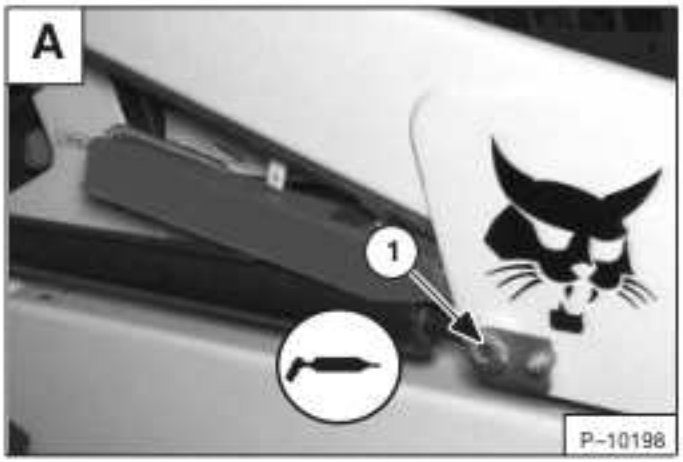
Lubricate the loader as specified in the *SERVICE SCHEDULE* Page 39 for the best performance of the loader.

Record the operating hours each time you lubricate the Bobcat loader.

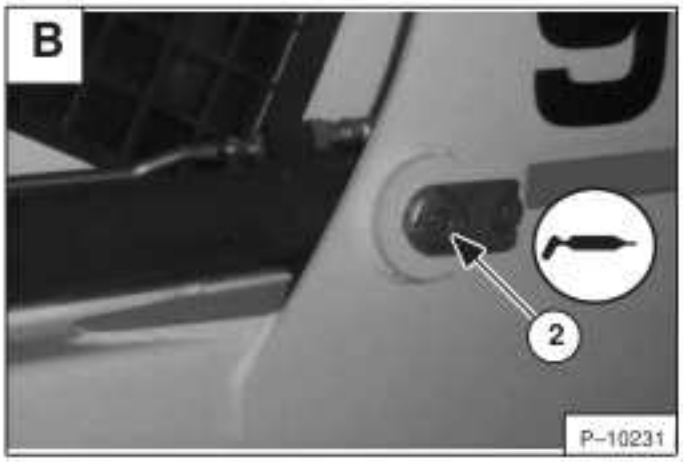
Always use a good quality lithium based multi–purpose grease. Apply the lubricant until extra grease shows.

Lubricate the following locations on the loader:

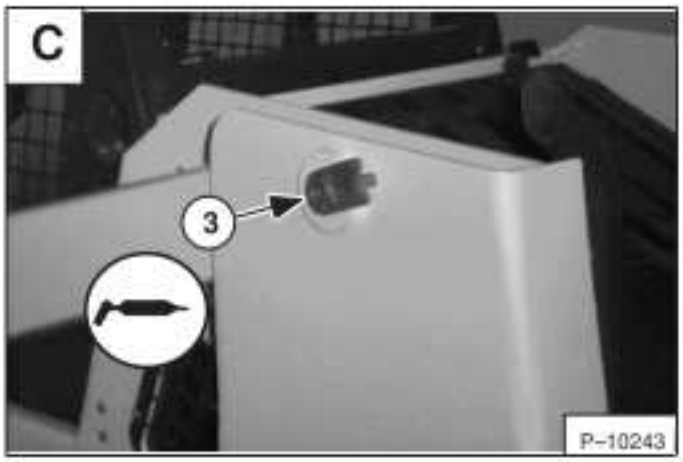
1. Rod End Lift Cylinder (Both Sides) **[A]**.



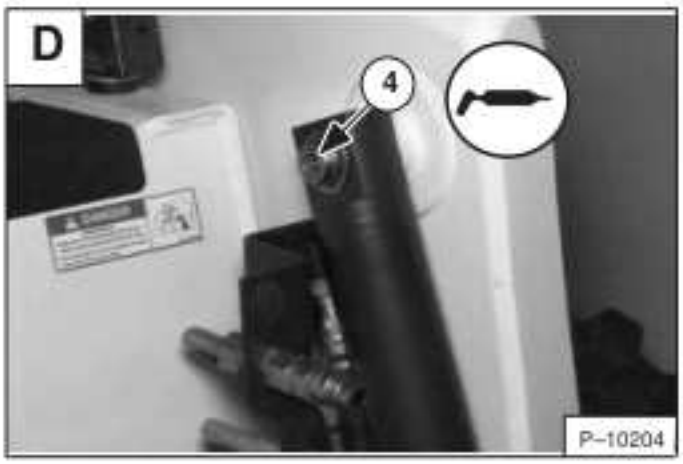
2. Base End Lift Cylinder (Both Sides) **[B]**.



3. Lift Arm Pivot Pin (Both Sides) **[C]**.



4. Base End Tilt Cylinder (Both Sides) **[D]**.



MidWestTech | Bobcat 963 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 Decal or as shown in this Operation & Maintenance Manual under **Daily Inspection**.

⚠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 and plastic 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.
- 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.
  - 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.

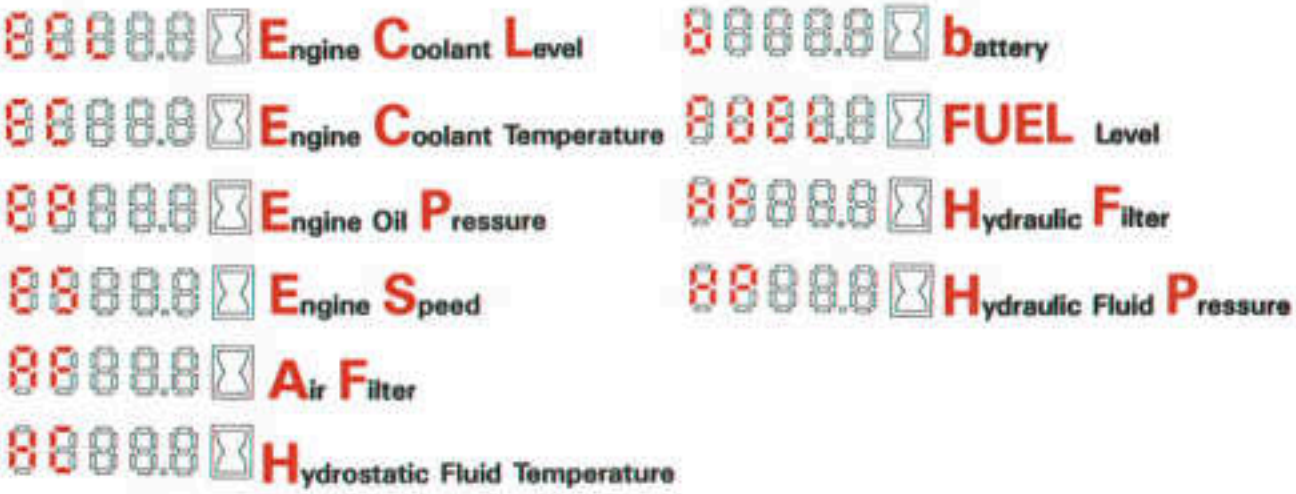
* For an operator be qualified, he must not use drugs or alcoholic drinks which impair his alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he can safely operate a machine.

SI02-0498

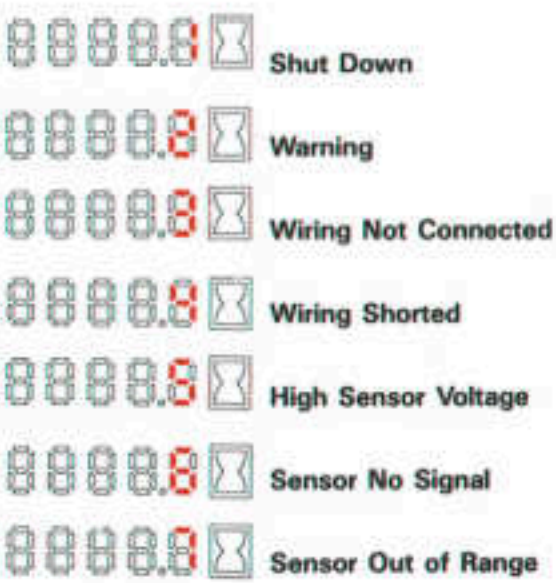
MidWestTech | Bobcat 963 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

MONITOR SERVICE CODES

One of the following Alphabetic Codes may appear on your monitor.



One of the following Numeric Codes will appear following one of the above Alphabetic Codes. Example: 



MidWestTech | Bobcat 963 Skid Steer Loader Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >