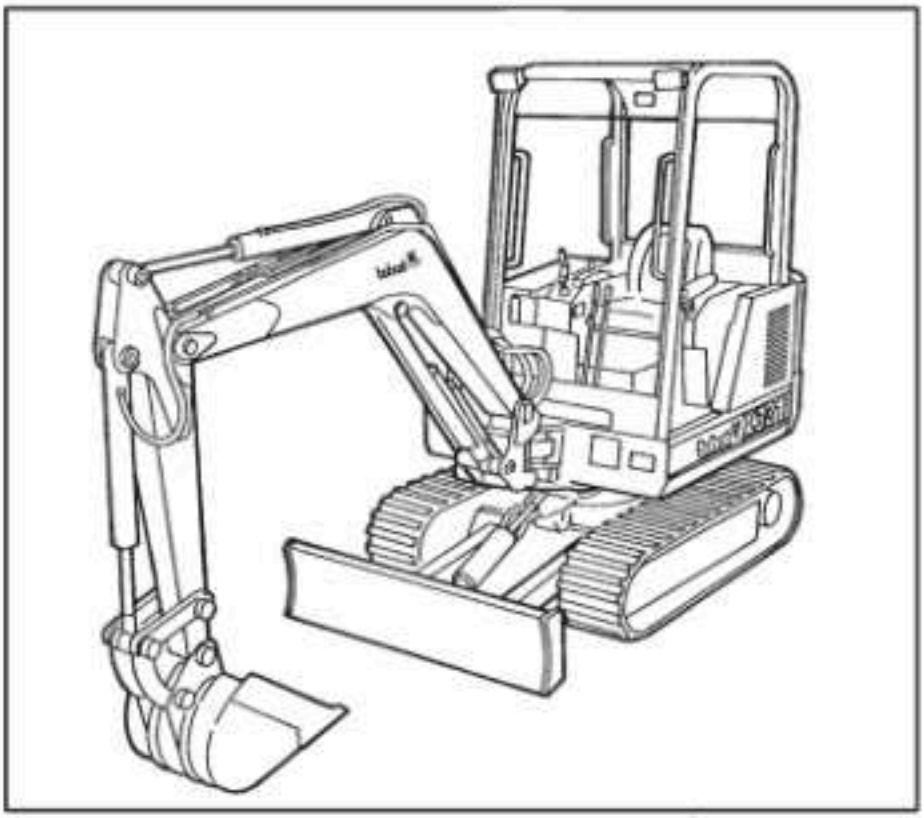
X 331

Excavator

Operation & Maintenance Manual

(S/N 512912001–512912999)



MELROE
INGERSOLL-RAND
6724471 (8-95)

Printed in U.S.A.

bobcat

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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 Hydraulic Excavator in the spaces below. Always use these numbers when referring to your Hydraulic Excavator.

Bobcat Hydraulic Excavator
Serial Number ..... _____
Engine Serial Number ..... _____
_____
_____
_____

NOTES: _____
_____
_____
_____
_____
_____

YOUR BOBCAT EXCAVATOR DEALER: _____
ADDRESS: _____
PHONE: _____

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

Melroe Europe
J. Huysmanslaan 59
B–1651 LOT
BELGIUM

FOREWORD
SAFETY
OPERATING INSTRUCTIONS
PREVENTIVE MAINTENANCE
MACHINE SIGN TRANSLATIONS
SPECIFICATIONS

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CONTROL LEVERS (JOYSTICKS)

The work equipment is operated by using the left and right control levers (joysticks) **[A]** & **[B]**.

Operation of Left Control Lever (ISO)

Arm and Swing (Decal P/N 6589741).

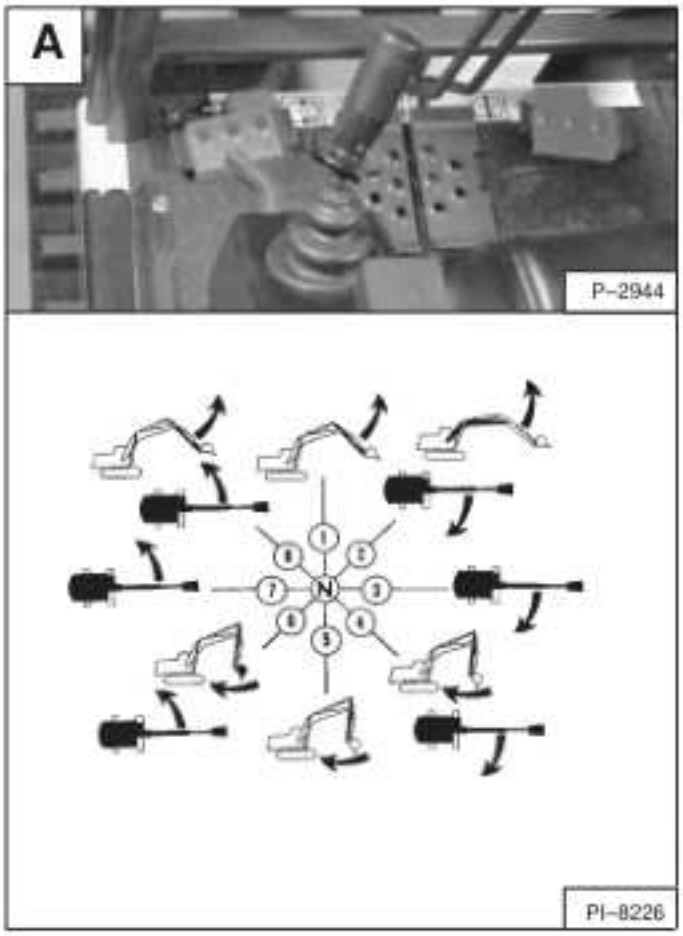
The left lever is used to operate the arm and to swing the upperstructure **[A]**:

1. Arm out.
2. Arm out and swing right.
3. Swing right.
4. Arm in and swing right.
5. Arm in.
6. Arm in and swing left.
7. Swing left.
8. Arm out and swing left.

IMPORTANT

Before swinging the upperstructure, make sure the swing lock is disengaged.

I-2051-0189



Operation of Right Control Lever (ISO)

Boom and Bucket (Decal P/N 6589740).

The right lever is used to operate the boom and bucket **[B]**.

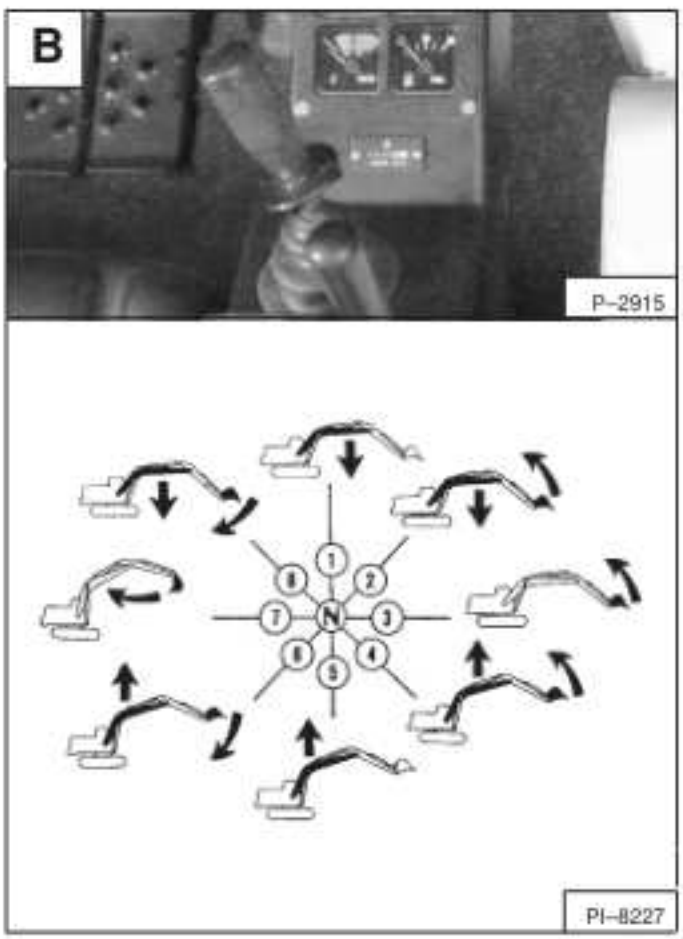
1. Boom lower.
2. Boom lower and bucket dump.
3. Bucket dump.
4. Boom raise and bucket dump.
5. Boom raise.
6. Boom raise and bucket curl.
7. Bucket curl.
8. Boom lower and bucket curl.

⚠ WARNING

Before leaving the machine:

- **Lower the attachments to the ground.**
- **Stop the engine & remove the key.**

W-2167-0195



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LUBRICATION OF THE HYDRAULIC EXCAVATOR

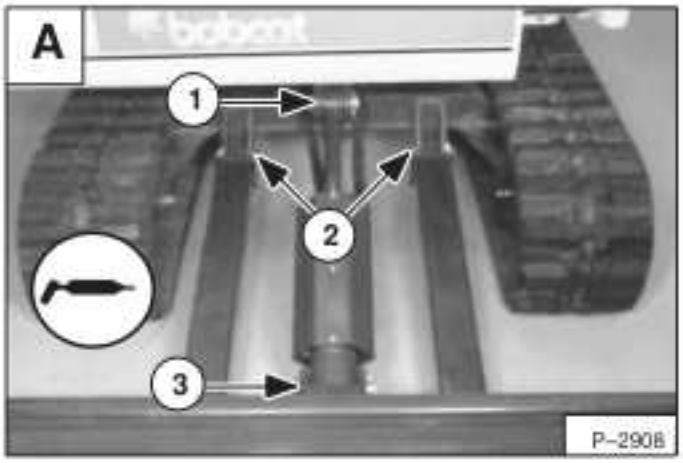
Lubricate the Hydraulic Excavator as specified in the Service Schedule (Page 26) for the best performance of the machine.

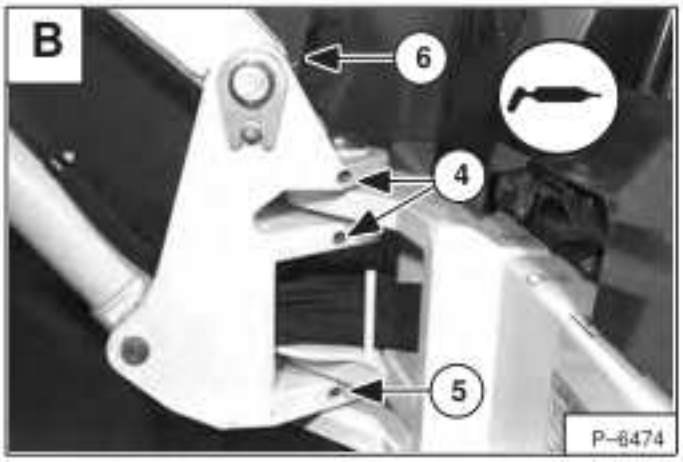
Record the operating hours each time you lubricate the Bobcat Hydraulic Excavator.

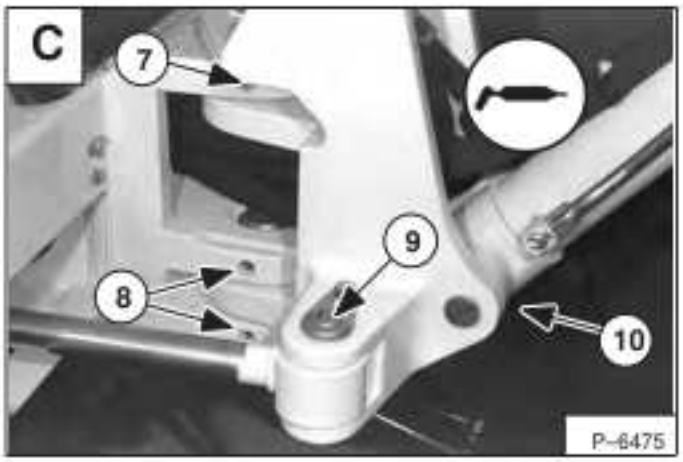
Always use a good quality lithium based multipurpose grease when lubricating the machine. Apply the lubricant until extra grease shows.

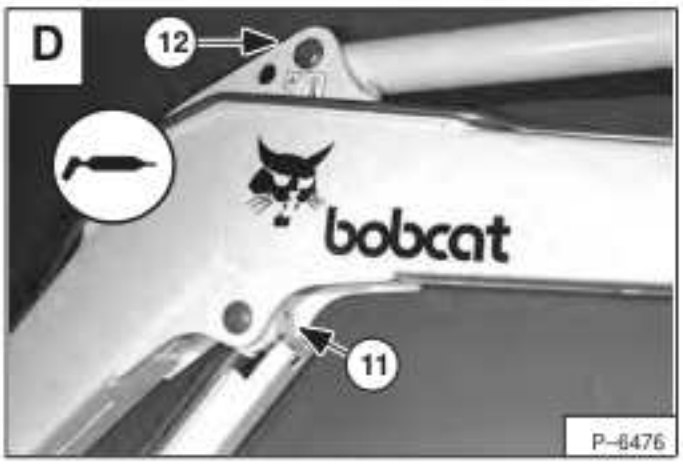
Lubricate the following locations on the Hydraulic Excavator **EVERY 8–10 HOURS:**

Ref.	Description (# of Fittings)
1.	Blade Cylinder Rod End (1) **[A]**.
2.	Blade Pivots (2) **[A]**.
3.	Blade Cylinder Base End (1) **[A]**.
4.	Boom Swing Bracket Pivot (2) **[B]**.
5.	Boom Swing Bracket (1) **[B]**.
6.	Boom Base Pivot (1) **[B]**.
7.	Boom Swing Bracket Top Pivot (1) **[C]**.
8.	Boom Swing Bracket Pivot (2) **[C]**.
9.	Boom Swing Cylinder Rod End (1) **[C]**.
10.	Boom Cylinder Base End (1) **[C]**.
11.	Boom Cylinder Rod End (1) **[D]**.
12.	Arm Cylinder Base End (1) **[D]**.







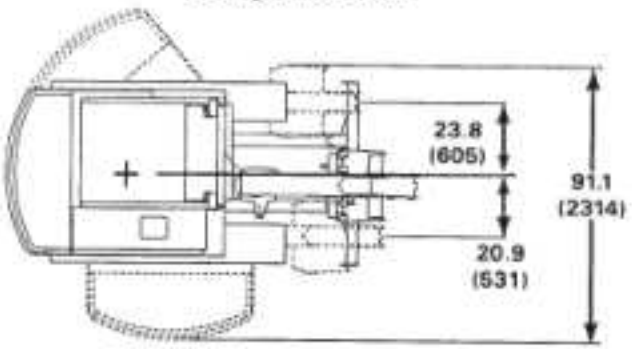


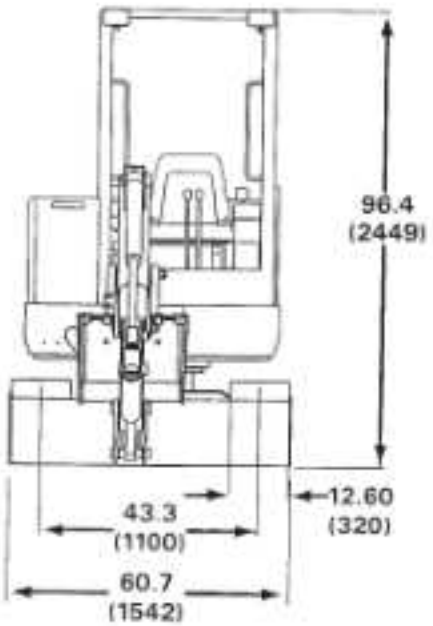
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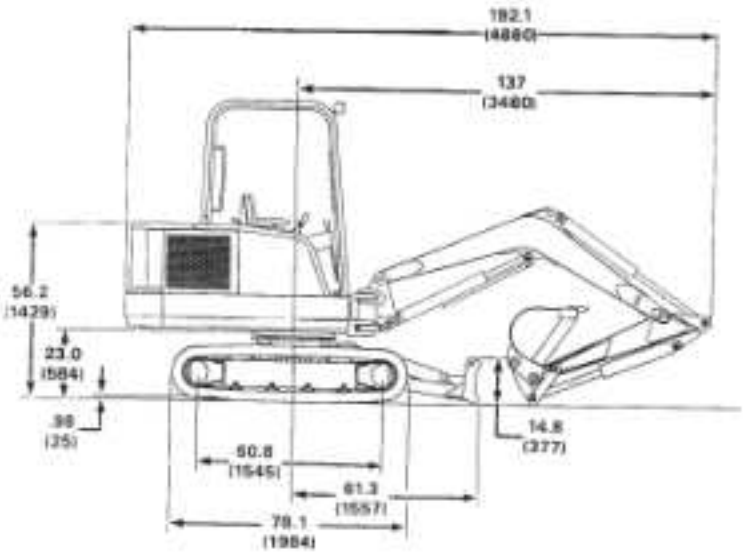
HYDRAULIC EXCAVATOR SPECIFICATIONS

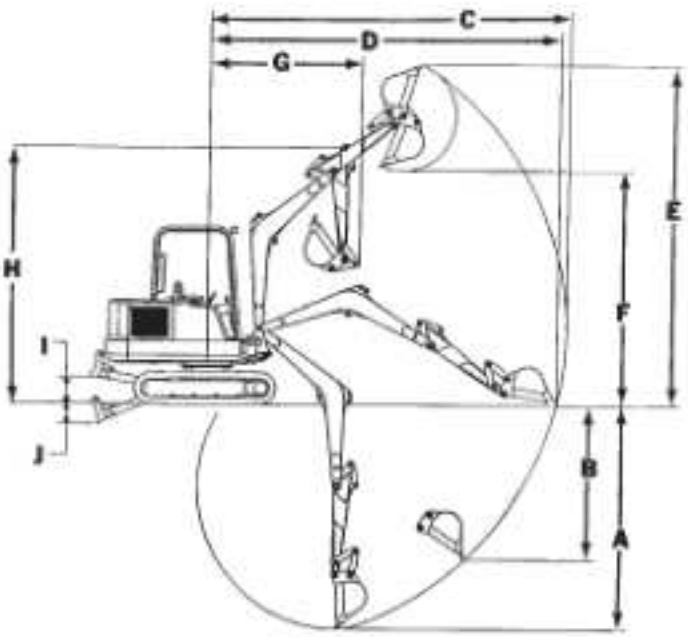
Machine Dimensions

- All dimensions are shown in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.
- Where applicable, specifications conform to SAE standards. Specifications are subject to change without notice.









		Inches (mm)
A	Max. digging depth	119.2 (3029)
B	Max. vertical wall depth	56.2 (1428)
C	Max. digging reach	195.4 (4963)
D	Max. digging reach at ground level	190.5 (4839)
E	Max. digging height	180.3 (4579)
F	Max. dumping height	124.4 (3160)
G	Max. Work Equip. Radius W/Boom at max. height & arm retracted	81.7 (2074)
H	Max. height of Min. swing radius	138.9 (3529)
I	Max. lift above ground (blade)	14.1 (358)
J	Max. drop below ground blade	11.0 (280)

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BEFORE OPERATING THE BOBCAT HYDRAULIC EXCAVATOR

Safety Alert Symbol: This Safety symbol is used for important safety messages. When you see this symbol, follow the safety message to avoid personal injury or death.

WARNING

Operator must have instructions before operating hydraulic excavator. Untrained operators can cause injury or death.



B–10731

The Excavator must be in good operating condition before use.

Check all of the items on the Service Schedule under the 8–10 hour column.

WARNING

For your safety, warnings are on the machine and in the Operation & Maintenance manual. 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, operator handbook, Operation & Maintenance Manual, and machine signs (decals).
  - Check the rules and regulations at your location.
- HAVE TRAINING WITH ACTUAL OPERATION
  - Operator training must consist of a demonstration and verbal instruction. This training is given by your excavator dealer before the excavator is delivered.
  - The new operator should start in an area without bystanders and use all the controls until he can operate safely under all conditions of the work area.
- KNOW THE WORK CONDITIONS
  - For each material to be handled, the operator must know how to avoid exceeding the rated lift capacity of the excavator. For example, you should not use the excavator for lifting heavy objects.
  - 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 "ONE CALL" before you dig.
  - Wear tight fitting clothing. Always wear safety glasses when maintaining or servicing excavator. Safety glasses, hearing protection or an excavator special application kit are required for some work. See your dealer about Melroe Safety equipment.

* For an operator to 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.

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