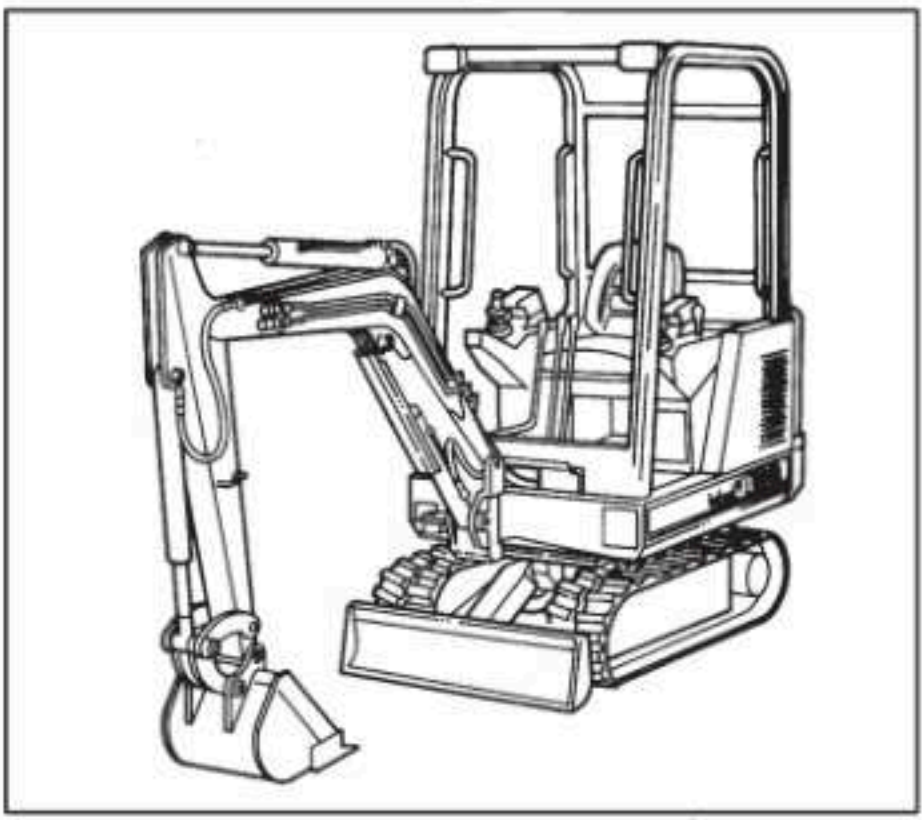
X 320

Excavator

Operation & Maintenance Manual

(S/N 511721116 & Above)



MELROE
INGERSOLL-RAND
6724026(8-95) Revised (9-96)

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

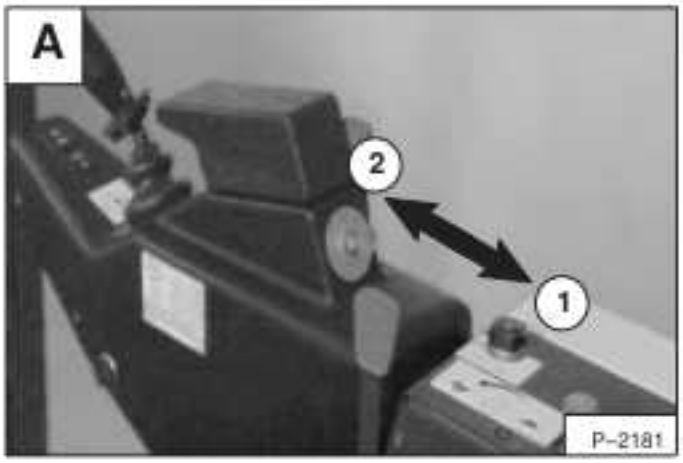
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SPEED CONTROL LEVER

The speed control lever is used to control the engine speed **[A]**.

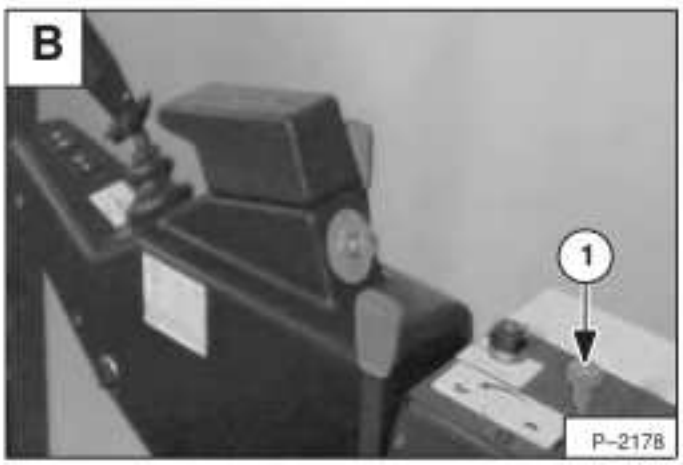
1. LOW IDLE POSITION – Pull the lever backward (position 1) for low idle, (Approximately 1000 RPM).

2. HIGH IDLE POSITION – Push the lever fully forward (position 2) for full engine RPM, (Approximately 2500 RPM).



ENGINE STOP CONTROL

Pull the knob (Item 1) **[B]** up to STOP the engine. (When the engine has stopped, push the stop control knob down to the operating position. This will avoid possible starter damage if engine start–up is attempted and the stop control knob has been left in the OFF position).



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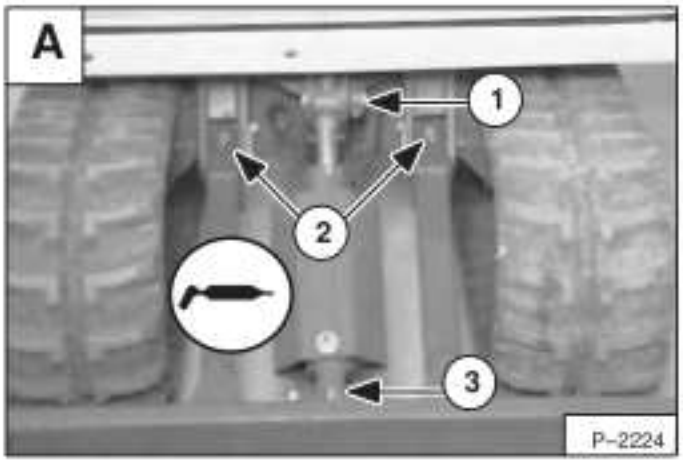
LUBRICATION OF THE HYDRAULIC EXCAVATOR

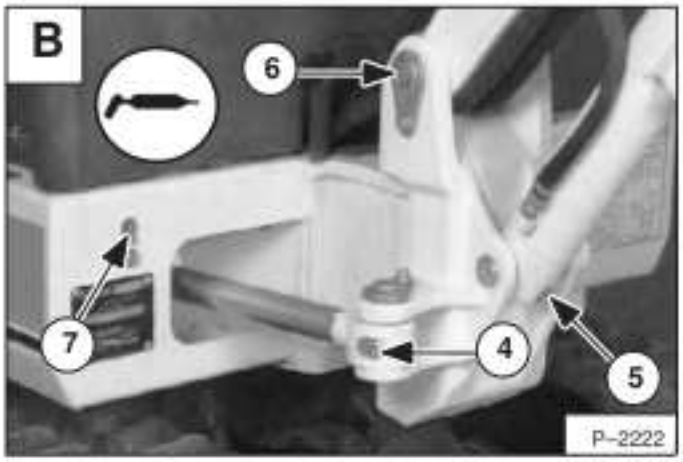
Lubricate the Hydraulic Excavator as specified in the *Service Schedule*, Page 29 for the best performance of the machine.

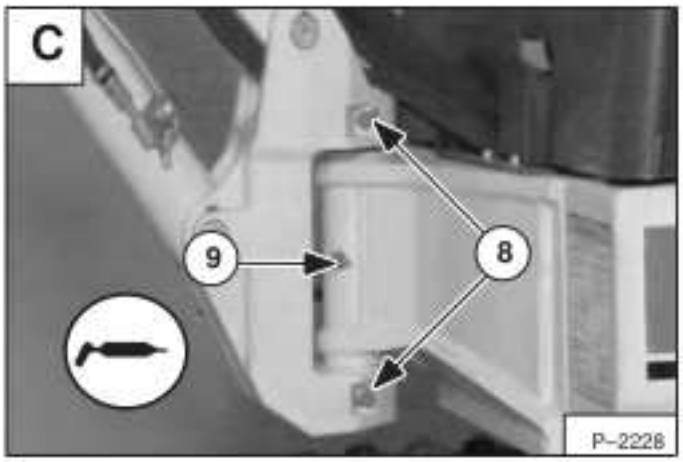
Record the operating hours each time you lubricate the Hydraulic Excavator.

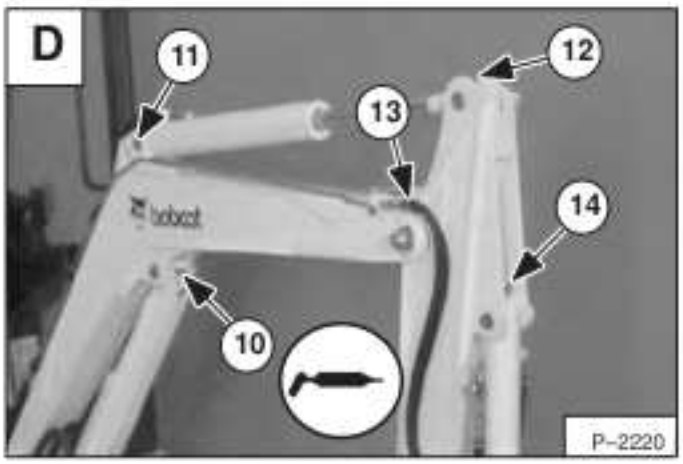
Always use a good quality lithium based multi–purpose grease when lubricating the machine. Apply the lubricant until extra grease shows.

Ref.	Description (# of Fittings)
1.	Blade Cylinder Rod End, every 8–10 hours (1) **[A]**.
2.	Blade Pivots, every 8–10 hours (2) **[A]**.
3.	Blade Cylinder Base End, every 8–10 hours (1) **[A]**.
4.	Boom Swing Cylinder Rod End, every 8–10 hours (1) **[B]**.
5.	Boom Cylinder Base End, every 8–10 hours (1) **[B]**.
6.	Boom Base Pivot, every 8–10 hours (1) **[B]**.
7.	Swing Circle Pinion, every 50 hours (1) **[B]**. Install 4 pumps of grease from a grease gun into the grease fitting. Rotate the upperstructure 180° and install 4 more pumps of grease into the grease fitting.
8.	Boom Swing Bracket Pivot, every 8–10 hours (2) **[C]**.
9.	Frame Swing Bracket Pivot, every 8–10 hours (1) **[C]**.
10.	Boom Cylinder Rod End, every 8–10 hours (1) **[D]**.
11.	Arm Cylinder Base End, every 8–10 hours (1) **[D]**.
12.	Arm Cylinder Rod End, every 8–10 hours (1) **[D]**.
13.	Arm Base Pivot, every 8–10 hours (1) **[D]**.
14.	Bucket Cylinder Base End, every 8–10 hours (1) **[D]**.



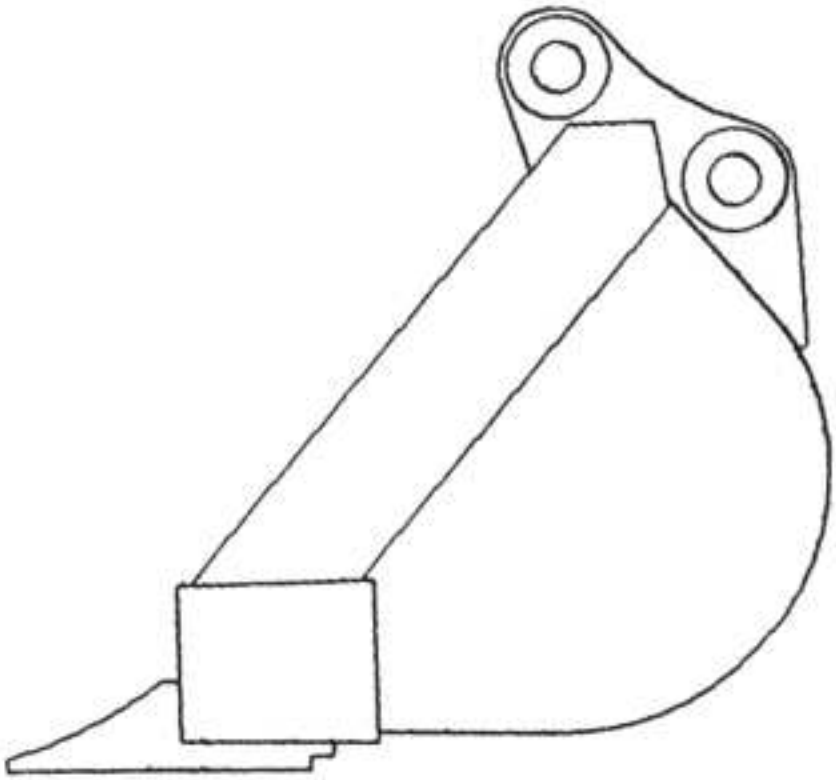






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BUCKET SPECIFICATIONS



MC–1411

Bucket Size	Capacity SAE Heaped	Shipped Weight
10.5 in. (268 mm)	.65 cu. ft. (0.018 cu.m.)	54.7 lbs. (24,8 kg)
12.5 in. (318 mm)	.81 cu. ft. (0.023 cu.m.)	63.6 lbs. (28,8 kg)
16.5 in. (418 mm)	1.21 cu. ft. (0.034 cu.m.)	72.9 lbs. (33,1 kg)
20.4 in. (518 mm)	1.55 cu. ft. (0.044 cu.m.)	85.6 lbs. (38.8 kg)

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BEFORE OPERATING THE BOBCAT LOADER

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

⚠ WARNING

Operator must have instructions before running the machine. Untrained operators can cause injury or death.

W-2001-1285



B-10731

⚠ WARNING

Warnings on the machine 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, 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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