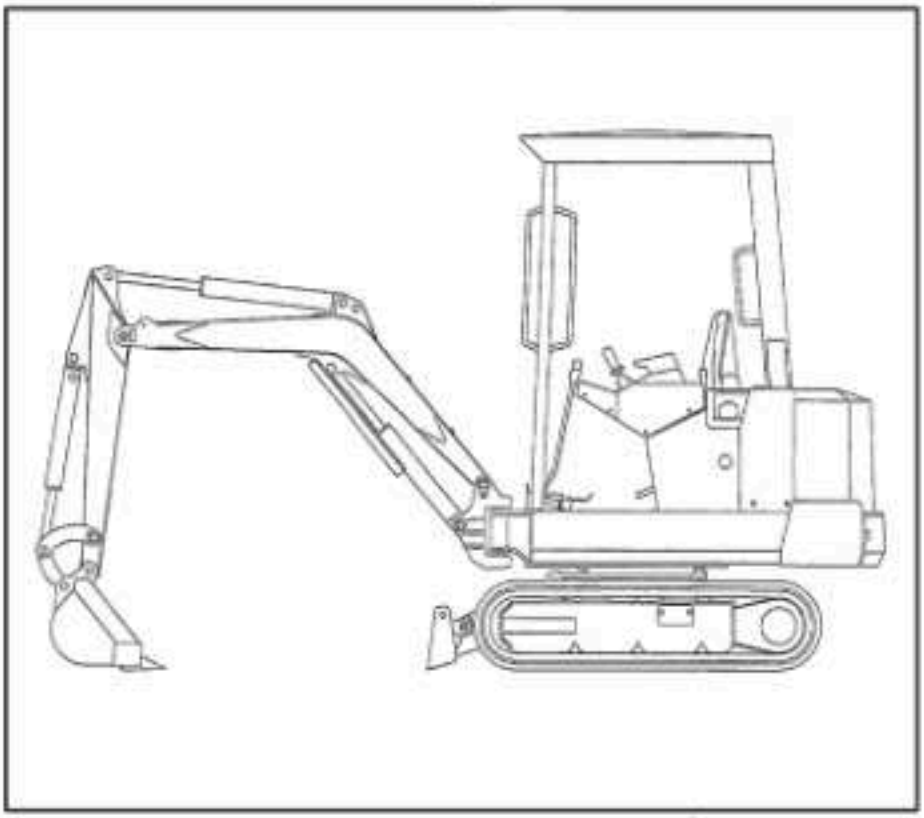
X 220

Excavator

Operation & Maintenance Manual

(S/N 508215001 & Above)



MELROE
INGERSOLL-RAND

6722250 (9-92) Revised (10-98)

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
SPECIFICATIONS

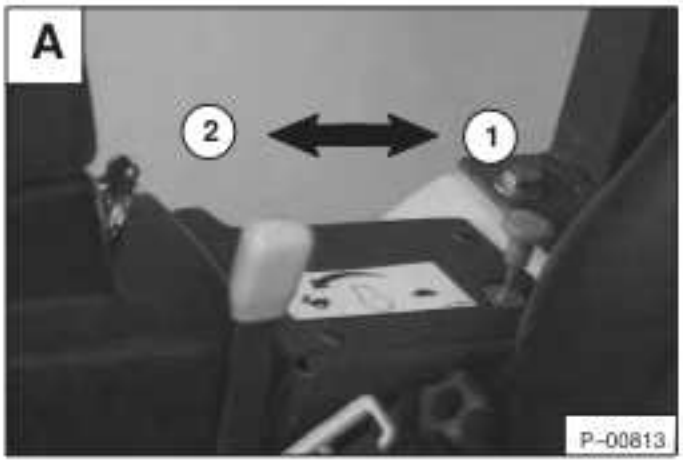
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SPEED CONTROL LEVER

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 up to STOP the engine **[B]**. (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).

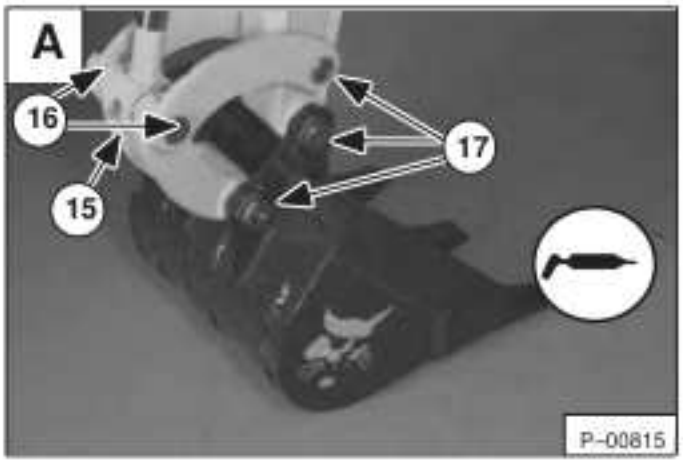


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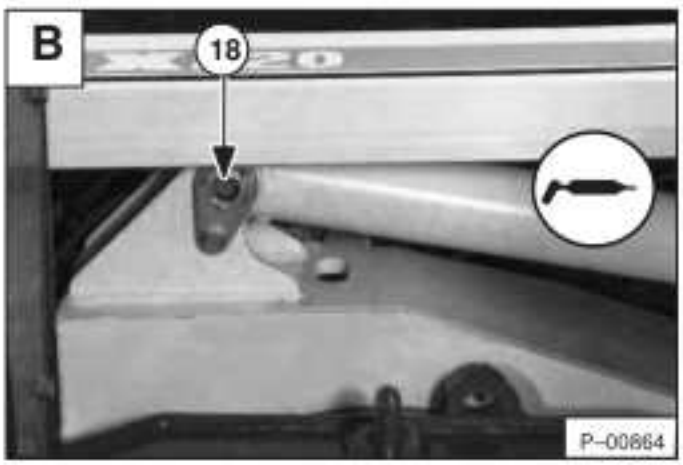
LUBRICATION OF THE HYDRAULIC EXCAVATOR (Cont'd)

Ref.	Description (# of Fittings)
15.	Bucket Cylinder Rod End, every 8–10 hours (1) **[A]**.
16.	Bucket Link Pivots, every 8–10 hours (2) **[A]**.
17.	Bucket Pivots, every 8–10 hours (3) **[A]**.



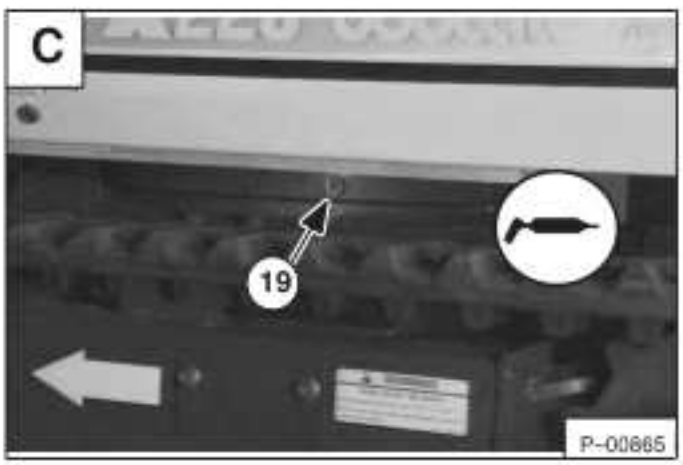
18. Boom Swing Cylinder Base End, every 8–10 hours (1) **[B]**.

NOTE: Access to the grease fitting is from under the upperstructure, right side.



19. Swing Circle Ball Bearing, every 50 hours (2) **[C]**.

NOTE: Do not over grease the swing circle or damage to the seal could result. Install 4 to 5 pumps of grease from a grease gun into each of the 2 grease fittings. Rotate the upperstructure 90° and install 4 to 5 pumps of grease into each of the 2 grease fittings.



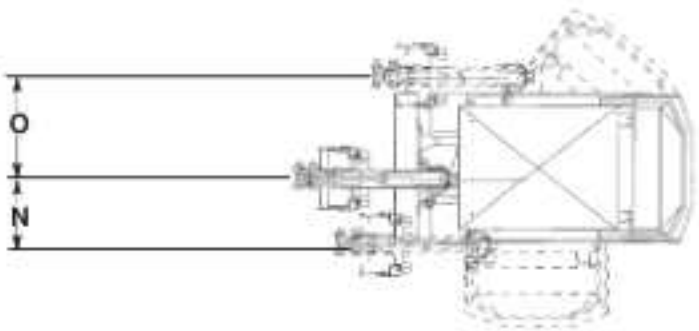
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HYDRAULIC EXCAVATOR SPECIFICATIONS

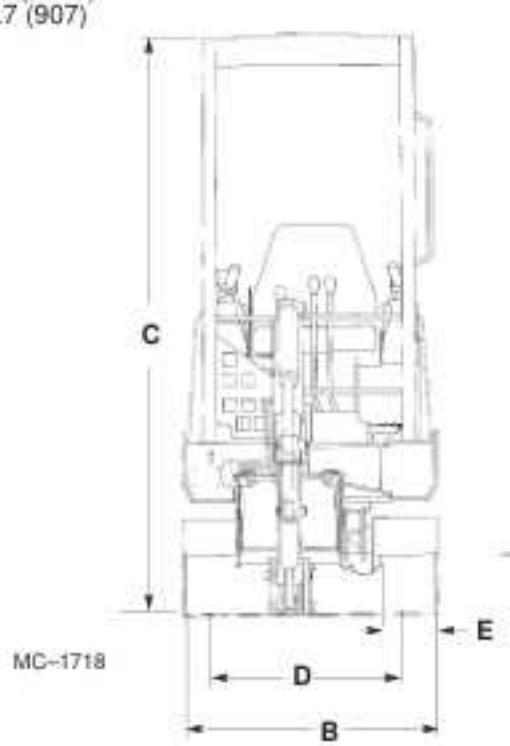
- All dimensions are shown in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.
- Where applicable, specification conform to SAE or ISO standards and are subject to change without notice.

Machine Dimensions

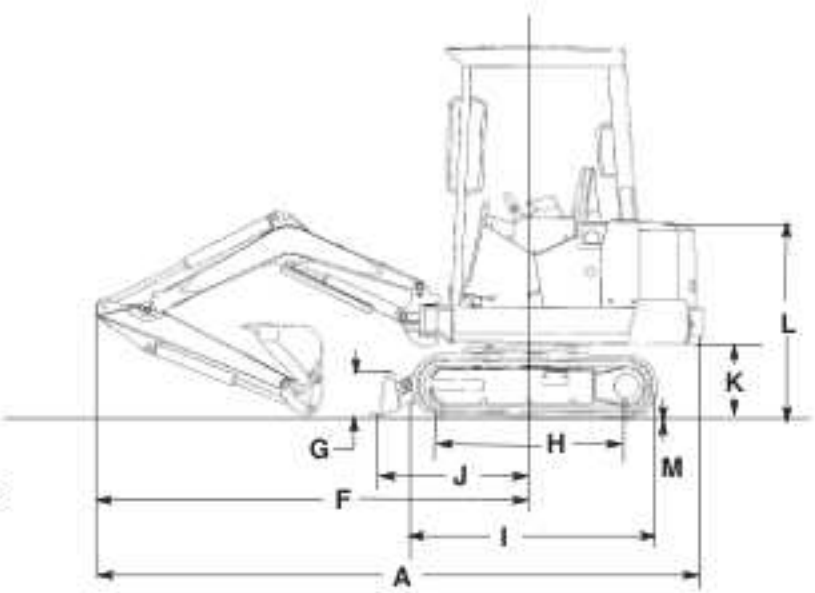
A – 102.7 (2609)
B – 38.62 (981)
C – 86.8 (3205)
D – 28.75 (730)
E – 9.84 (250)
F – 102.7 (2609)
G – 10.4 (264)
H – 43.8 (1112)
I – 58.3 (1480)
J – 35.7 (907)
K – 17.15 (435)
L – 45.8 (1164)
M – 1.02 (26)
N – 20.10 (511)
O – 23.62 (600)



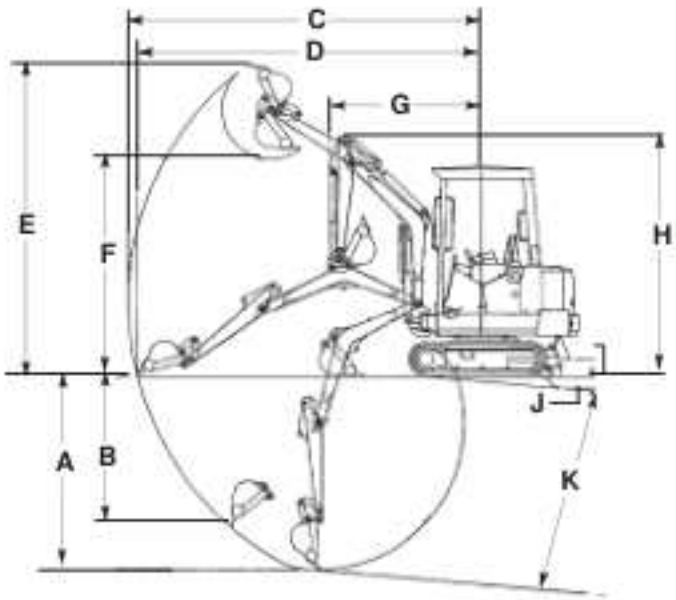
MC–1720



MC–1718



MC–1717



MC–1719

		With 40.2 (1023) Dipperarm
A	Max. digging depth	79.87 (2029)
B	Max. vertical wall depth	47.43 (1205)
C	Max. digging reach	147.8 (3754)
D	Max. digging reach at ground level	144 (3657)
E	Max. digging height	129.5 (3288)
F	Max. dumping height	90.2 (2291.4)
G	Min. swing radius (when using boom swing)	63 (1601)
H	Max. height of Min. swing radius	100.1 (2542.6)
I	Max. lift above ground (blade)	73.1 (186)
J	Max. drop below ground blade	4.9 (124)
K	Max. digging depth blade down	83.7 (2125)

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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 Bobcat loader or excavator and approved attachment. Untrained operators can cause injury or death.

W-2253-0996



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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