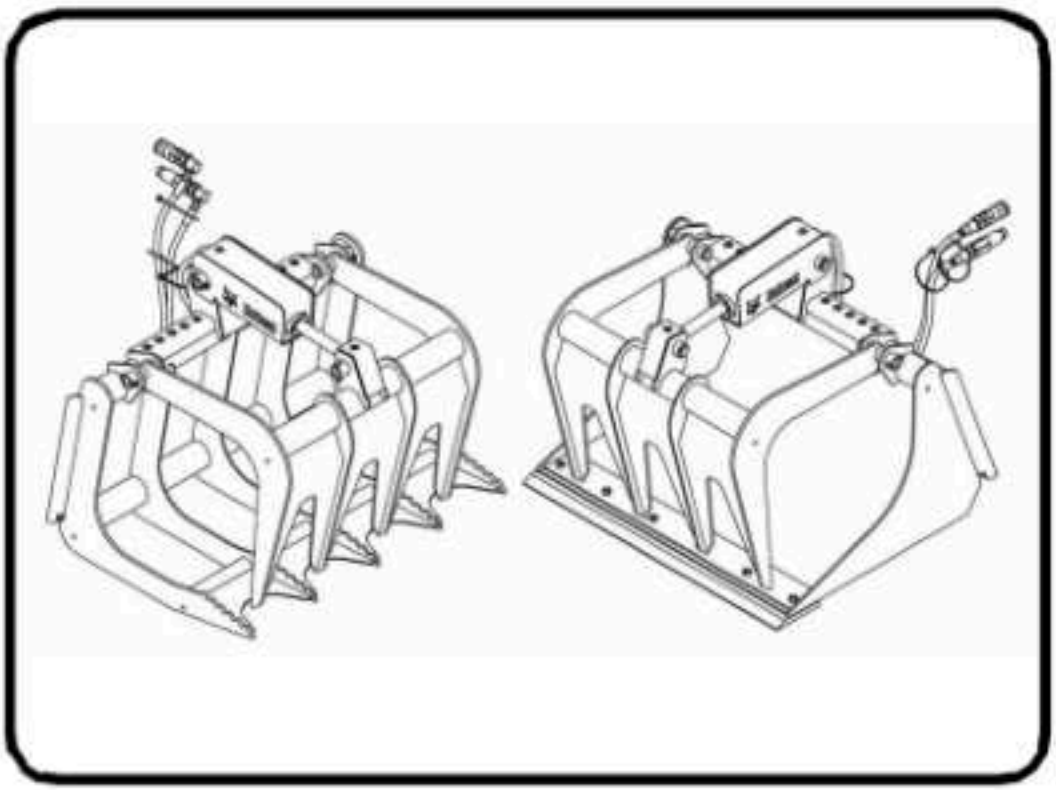
Bobcat®

Operation & Maintenance Manual
Root / Industrial Grapple

(36 Root Grapple) S/N A67800101 & Above
(48 Root Grapple) S/N A87D00101 & Above
(36 Ind Grapple) S/N A6S100101 & Above
(48 Ind Grapple) S/N A87900101 & Above



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REFERENCE INFORMATION

Write the correct information for YOUR Bobcat root / industrial grapple in the spaces below. Always use these numbers when referring to your Bobcat root / industrial grapple.

Root / Ind. Grapple Serial Number _____

NOTES:

_____

_____

_____

_____

_____

YOUR BOBCAT DEALER:

_____

ADDRESS:

_____

PHONE:

_____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128
UNITED STATES OF AMERICA

Doosan Benelux SA
Drève Richelle 167
B-1410 Waterloo
BELGIUM

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FOREWORD

This Operation & Maintenance Manual was written to give the owner / operator instructions on the safe operation and maintenance of the Bobcat root / industrial grapple. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR BOBCAT ROOT / INDUSTRIAL GRAPPLE. If you have any questions, see your Bobcat dealer.

BOBCAT COMPANY IS IS0 9001 CERTIFIED 5

SERIAL NUMBER LOCATION 6
Attachment Serial Number 6

DELIVERY REPORT 6

ATTACHMENT IDENTIFICATION 7

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Control Functions

⚠ WARNING

AVOID INJURY OR DEATH

When operating the machine:

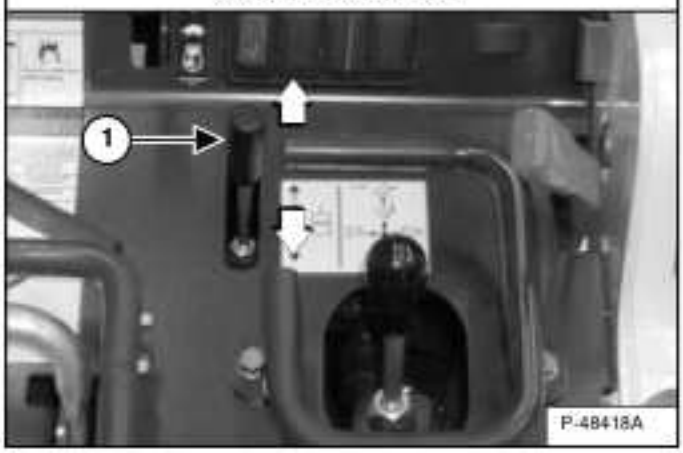
- **Operate only from the operator's position at the rear of the loader.**
- **Always keep your hands on the controls.**
- **Stay away from the tracks.**

W-2407-0801

With the operator at the operator's position at the rear of the mini loader, start the engine.

Figure 57

Model MT52 & MT55



Your mini loader is equipped with auxiliary hydraulics which provides hydraulic power for attachments. The auxiliary control lever (Item 1) **[Figure 57]** (MT52 and MT55) will be used to operate the grapple.

Push the auxiliary hydraulic lever forward to close the grapple.

Pull the auxiliary hydraulic lever back to open the grapple.

NOTE: If the grapple does not function as explained above, stop the engine. Relieve the auxiliary hydraulic pressure. Exit the mini loader and switch the couplers on the hoses.

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REGULAR MAINTENANCE ITEMS

Industrial Grapple Cutting Edge Replacement

⚠ WARNING

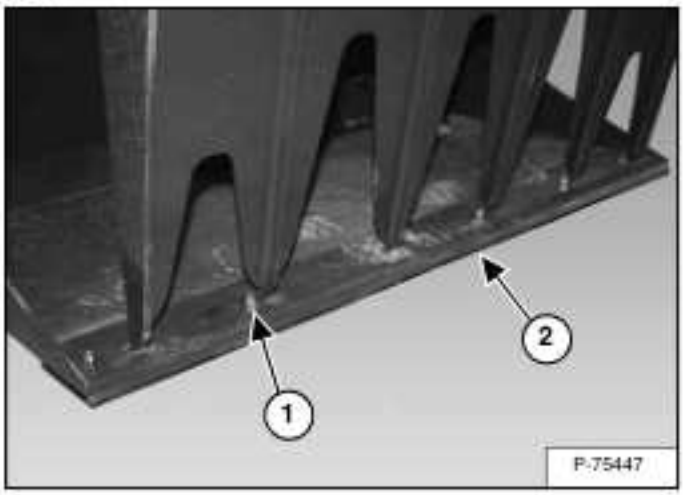
AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- **When fluids are under pressure.**
- **Flying debris or loose material is present.**
- **Engine is running.**
- **Tools are being used.**

W-2019-0907

Figure 70



Remove the bolts and nuts (Item 1) **[Figure 70]** on the cutting edge.

Remove and replace cutting edge (Item 2) **[Figure 70]** using existing hardware or equivalent Grade 8 fasteners.

Installation: Tighten bolts to 125 - 135 N•m (90 - 100 ft-lb) torque.

LUBRICATING THE ATTACHMENT

Lubrication Locations

Always use a good quality lithium base multi-purpose grease when lubricating the root / industrial grapple. Apply lubricant until extra grease shows.

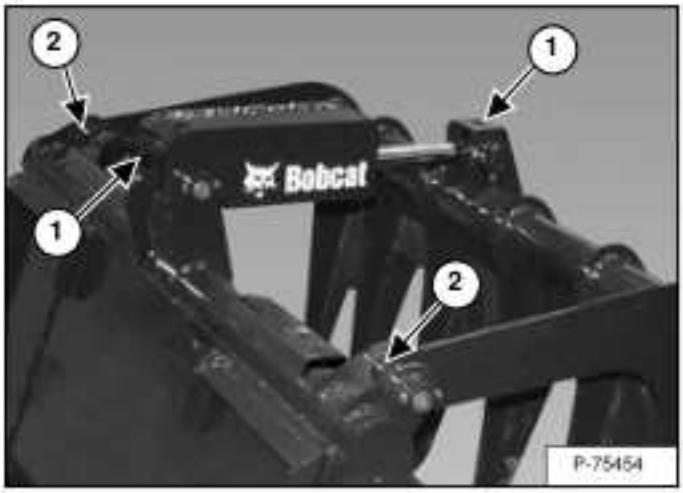
Lubricate the grease fittings, EVERY 8 - 10 hours.

IMPORTANT

Fluid such as engine oil, hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for the correct disposal.

I-2067-0499

Figure 71



Apply grease to the cylinder grease fittings (Item 1) and to the bucket pivot points (Item 2) **[Figure 71]**.

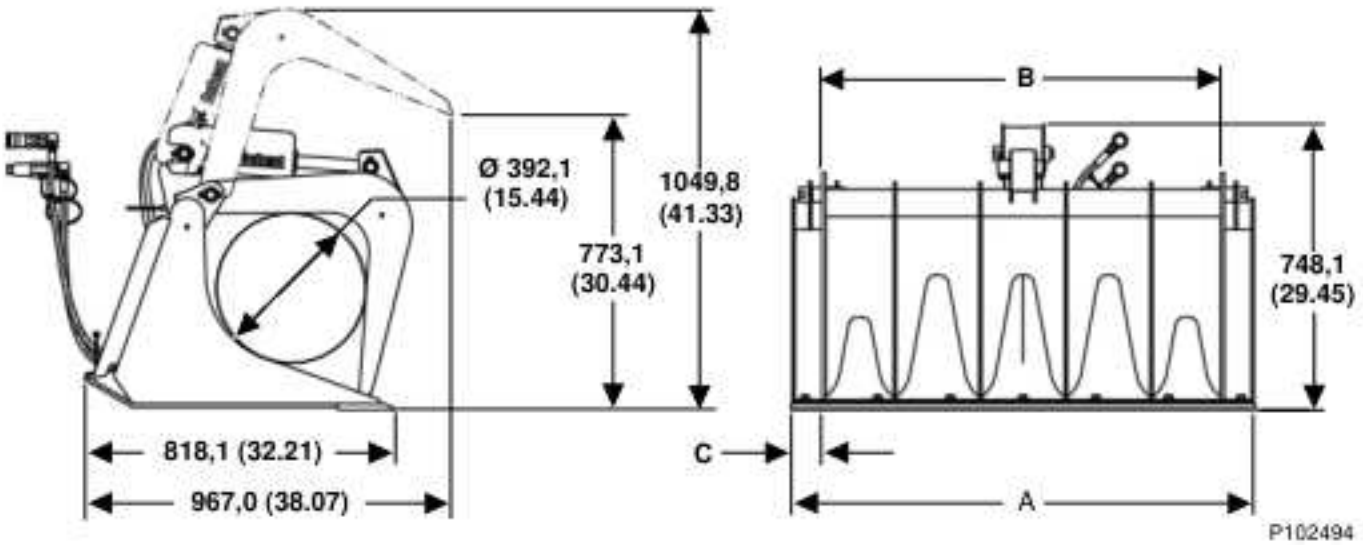
Clean the debris and / or dirt from between the hydraulic cylinder and the back of the bucket as needed.

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SPECIFICATIONS (CONT'D)

Industrial Grapple

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



INDUSTRIAL GRAPPLE		
Grapple	**36 Ind Grapple**	**48 Ind Grapple**
Dimension A (Overall Width)	914,4 mm (36 in)	1219,2 mm (48 in)
Dimension B (Arm Width)	685,8 mm (27 in)	1057,7 mm (41.6 in)
Dimension C	114,3 mm (4.5 in)	80,8 mm (3.2 in)
Weight	166 kg (365 lb)	203 kg (448 lb)
Cylinder Bore Diameter	63,5 mm (2.50 in)	
Cylinder Rod Diameter	31,8 mm (1.25 in)	
Cylinder Stroke	152,4 mm (6 in)	

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SAFETY INSTRUCTIONS

Safe Operation Is The Operator's Responsibility

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 operating the machine. Untrained operators can cause injury or death.

W-2001-0502

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284

DANGER

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

D-1002-1107

WARNING

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

W-2044-1107

The Bobcat machine and attachment must be in good operating condition before use.

Check all of the items on the Bobcat Service Schedule Decal under the 8 - 10 hour column or as shown in the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

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

A Qualified Operator Must Do The Following:

Understand the Written Instructions, Rules and Regulations

- The written instructions from Bobcat Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, 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 a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation

- Operator training must consist of a demonstration and verbal instruction. This training is given by your Bobcat dealer before the product is delivered.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the machine load capacities. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of load if handling dense material.
- The operator must know any prohibited uses or work areas, for example, he or she 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 *Call Before You Dig* Section of this manual.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, respiratory equipment, hearing protection, Special Applications Kits or a Front Window Guard are required for some work. See your Bobcat dealer about Bobcat Safety equipment for your machine.

SI ATT-0509

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