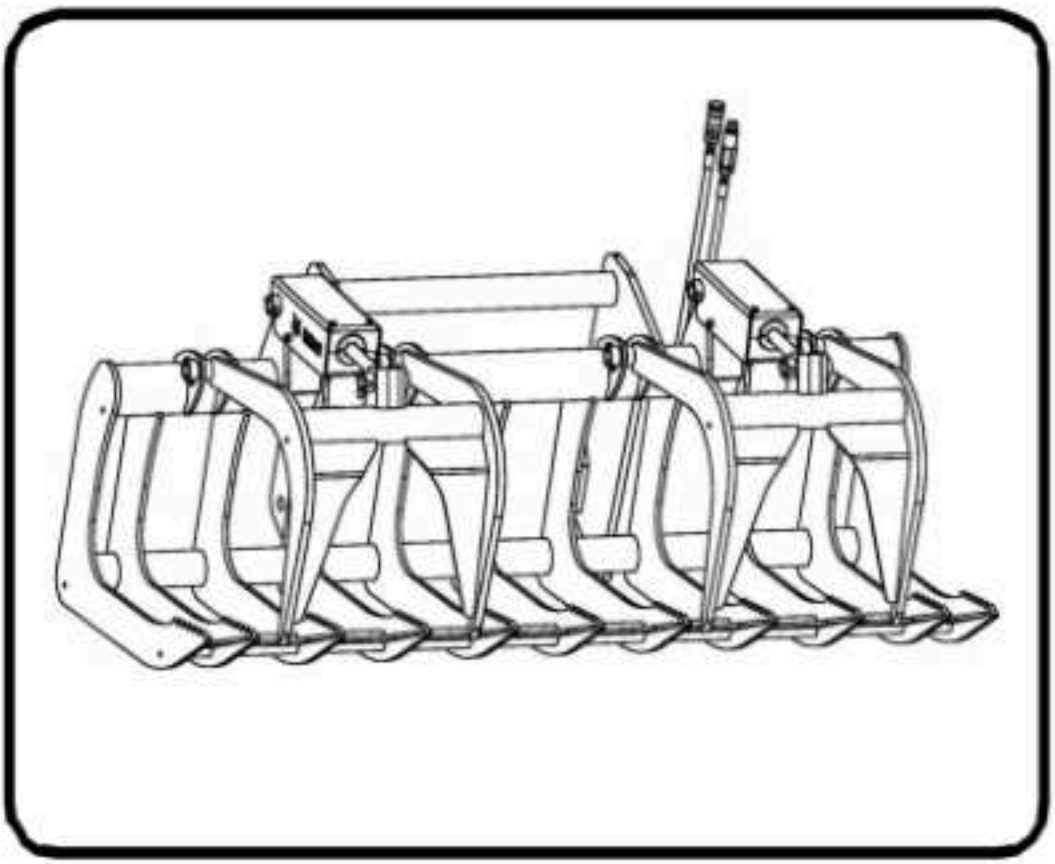
Bobcat®

Operation & Maintenance Manual
82 Inch Root Grapple

(82 V/H ROOT GRPL) S/N AJ5E00101 & Above



6989430 (11-09)

Printed in U.S.A.

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CONTENTS

CONTENTS 1

FOREWORD 3

SAFETY & TRAINING RESOURCES 9

OPERATING INSTRUCTIONS 17

PREVENTIVE MAINTENANCE 37

SPECIFICATIONS 55

WARRANTY 65

ALPHABETICAL INDEX 69

REFERENCE INFORMATION

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

82 Inch Root 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 root grapple. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR ROOT 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
Root Grapple 7

FEATURES AND ACCESSORIES 8
Standard Items 8

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OPERATING PROCEDURE WITH VERSAHANDLERS (CONT'D)

Entering And Exiting The VersaHANDLER

⚠ WARNING

AVOID INJURY OR DEATH

When operating the machine:

- **Keep the seat belt fastened snugly.**
- **Lower the restraint bar (if equipped).**
- **Keep your feet and arms inside the cab.**

W-2810-1109

Entering

Figure 10



Use the hand grabs (Item 1) **[Figure 10]** to enter the operator cab.

NOTE: Maintain three-point contact at all times while entering or exiting the VersaHANDLER. Do not jump.

Figure 11



Fasten seat belt and lower the restraint bar (Item 1) **[Figure 11]** (*if equipped*), and engage the parking brake.

Put the Travel Direction Control lever and joystick in neutral.

See your VersaHANDLER's Operation & Maintenance Manual and Operator's Handbook for detailed information on operating the VersaHANDLER.

Exiting

Put the Travel Direction Control Lever and the Joystick in neutral.

Engage the parking brake.

Retract and lower the boom and attachment flat on the ground.

Stop the engine.

Raise the restraint bar (*if equipped*) and make sure the lift, tilt, boom extend, auxiliary hydraulic and traction drive functions are deactivated.

Remove the key.

Exit the VersaHANDLER.

⚠ WARNING

Before you leave the operator's position:

- **Put the travel Direction Control Lever and the Joystick in neutral.**
- **Engage the parking brake.**
- **Retract and lower the boom and attachment flat on the ground.**
- **Stop the engine. Raise the restraint bar (if equipped).**

SEE THE MACHINE OPERATION & MAINTENANCE MANUAL FOR MORE INFORMATION.

W-2637-0607

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LUBRICATING THE ATTACHMENT

Lubrication Locations

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

⚠ WARNING

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

- **Pressurized fluids and springs or other stored energy components.**
- **Flying debris or loose material is present.**
- **Engine is running.**
- **Tools are being used.**

W-2505-0604

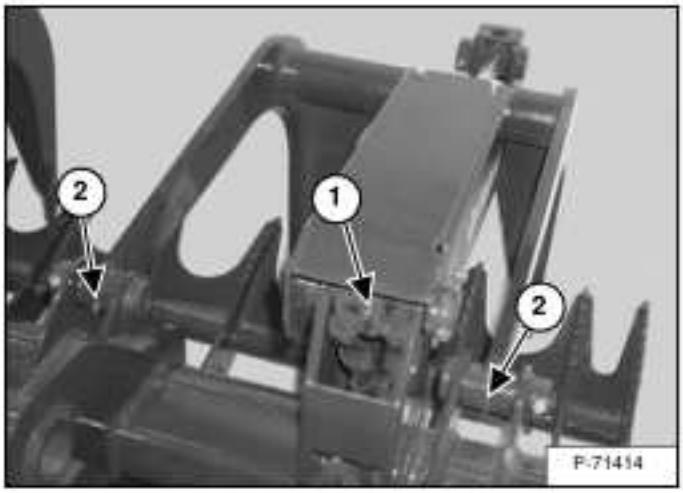
IMPORTANT

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

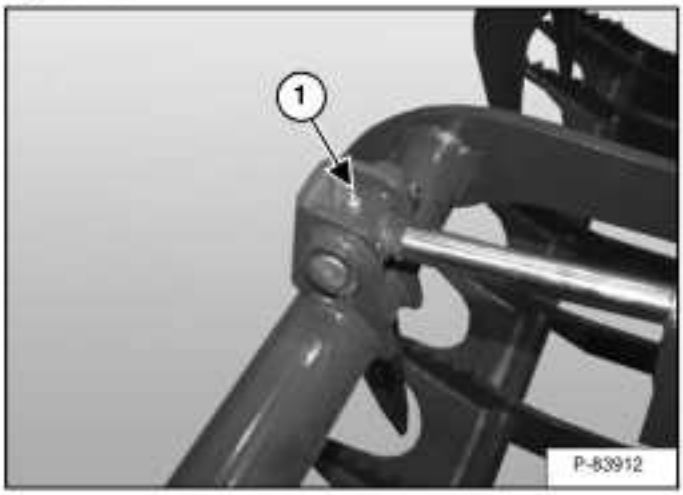
Lubricate the grease fittings EVERY 8 - 10 hours.

Figure 44



Apply grease to the cylinder base end grease fitting (Item 1) and to the grapple pivot grease fittings (Item 2) **[Figure 44]** (both sides).

Figure 45



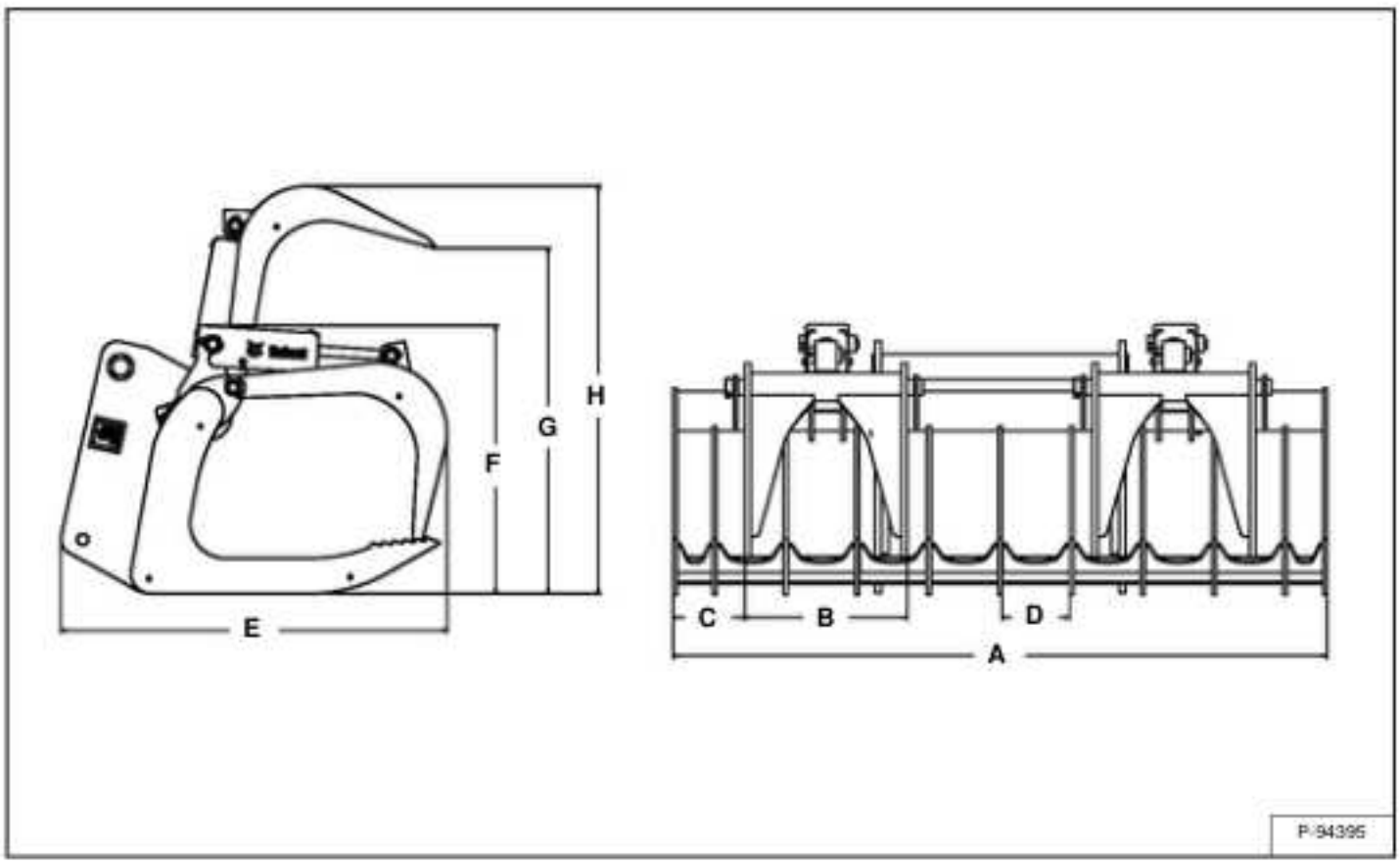
Apply grease to the cylinder rod end grease fittings (Item 1) **[Figure 45]** (both sides).

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(82 V/H ROOT GRPL) SPECIFICATIONS

Dimensions

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



DESCRIPTION	82 V/H ROOT GRPL
Overall Width Of Grapple (Dim A)	82.5 in (2095,5 mm)
Overall Width Of Grapple Forks (Dim B)	20.57 in. (522,5 mm)
Inset Of Forks (Dim C)	9.03 in. (229,4 mm)
Width Of Teeth (Dim D)	8.50 in. (215,9 mm)
Overall Depth Of Grapple (Dim E)	49.09 in. (1246,9 mm)
Closed Height Of Grapple (Dim F)	34.06 in. (865,2 mm)
Inside Height Of Grapple (Dim G)	43.89 in. (1114,7 mm)
Opened Height Of Grapple (Dim H)	51.78 in. (1315,3 mm)

Performance

Weight	1219 lb. (553 kg)
Cylinder Stroke	8.0 in. (203,2 mm)
Cylinder Bore Diameter	2.5 in. (63,5 mm)
Cylinder Rod Diameter	1.25 in. (31,8 mm)

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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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