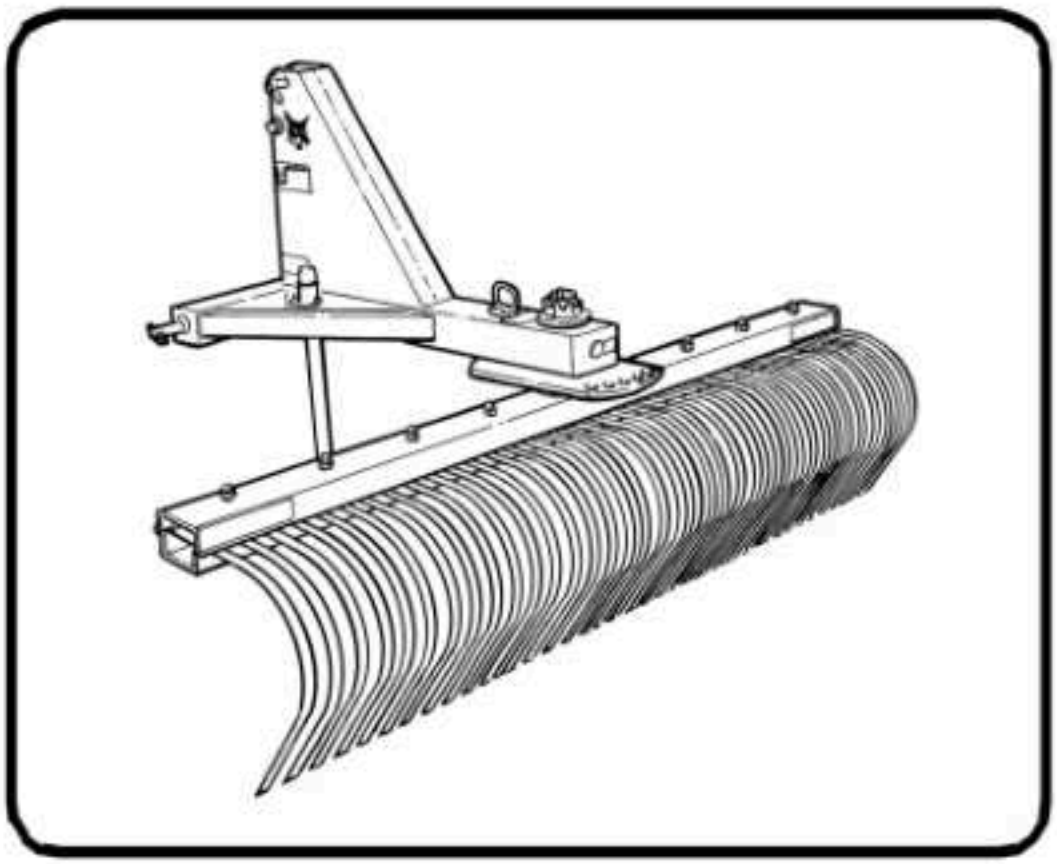
Bobcat®

Operation & Maintenance Manual
Three-Point Tine Rake

(3TR60) S/N AKZN00101 & Above
(3TR72) S/N AKZP00101 & Above
(3TR84) S/N AKZR00101 & Above
(3TR96) S/N AKZS00101 & Above



6989536 (1-10) Revised (3-10) (1)

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REFERENCE INFORMATION

Write the correct information for YOUR three-point tine rake in the spaces below. Always use these numbers when referring to your three-point tine rake.

Three-Point Tine Rake
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 three-point tine rake. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR THREE-POINT TINE RAKE. If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your three-point tine rake.

BOBCAT COMPANY IS IS0 9001 CERTIFIED 5

SERIAL NUMBER LOCATION 6

DELIVERY REPORT 6

IMPLEMENT IDENTIFICATION 7

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Operation With The Compact Tractor (Cont'd)

Operating The Three-Point Implement

The three-point tine rake can be used for leveling, landscaping, road maintenance and snow removal.

Always park on flat level ground. Lower the three-point tine rake slightly above the ground. (See the compact tractor's Operation & Maintenance Manual for detailed information on operating the three-point hitch.)

Stop the engine and exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 36.)

⚠ WARNING

AVOID INJURY OR DEATH

Before you leave the operator's seat:

- **Fully lower the loader arms, put the attachment flat on the ground (if equipped).**
- **Fully lower the implement(s) to the ground (if equipped).**
- **Lock brake pedals together and engage the parking brake.**
- **Place F-N-R lever in neutral (SST models only).**
- **Place all controls in neutral.**
- **Stop the engine, unfasten the seat belt and remove the key.**

W-2569-0909

The three-point tine rake may be adjusted in any single or combination of the positions listed:

- Angled (See Angled Positioning on Page 42.)
- Backfilling (See Backfilling Positioning on Page 43.)

Enter the compact tractor. (See Entering And Exiting The Compact Tractor on Page 36.) Start the engine and release the parking brake.

⚠ WARNING

AVOID INJURY OR DEATH

Fasten seat belt, start and operate only from the operator seat.

W-2269-1197

Slowly drive the tractor with the three-point tine rake on the ground. Adjust the three-point hitch for desired position. (See the compact tractor's Operation & Maintenance Manual for detailed information on operating the three-point hitch.)

⚠ WARNING

CRUSHING CAN CAUSE SERIOUS INJURY OR DEATH

- **Keep all bystanders away from equipment when operating.**
- **Fully lower the implement before leaving the operators seat.**

W-2832-0110

The top link may need to be adjusted to set the rake tines to the correct position. (See Top Link on Page 40.)

NOTE: Watch for and avoid obstructions and obstacles that could cause damage to the three-point tine rake and compact tractor.

NOTE: Damage to the three-point tine rake and compact tractor may occur by hitting hidden objects.

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LUBRICATING THE IMPLEMENT

Lubrication Locations

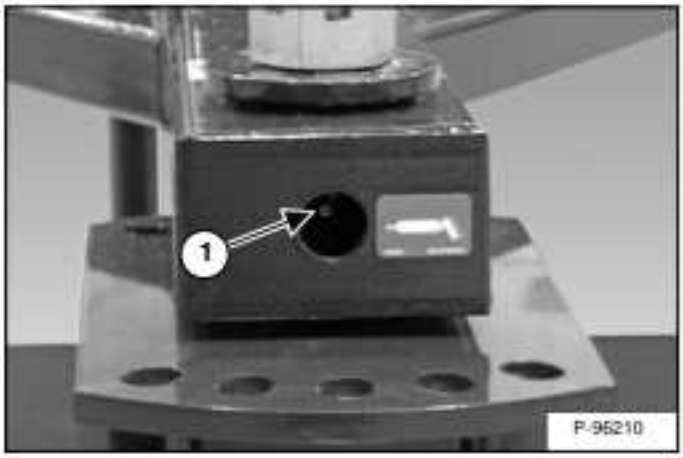
IMPORTANT

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

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

Figure 63



Lubricate the following location (Item 1) **[Figure 63]** before each use.

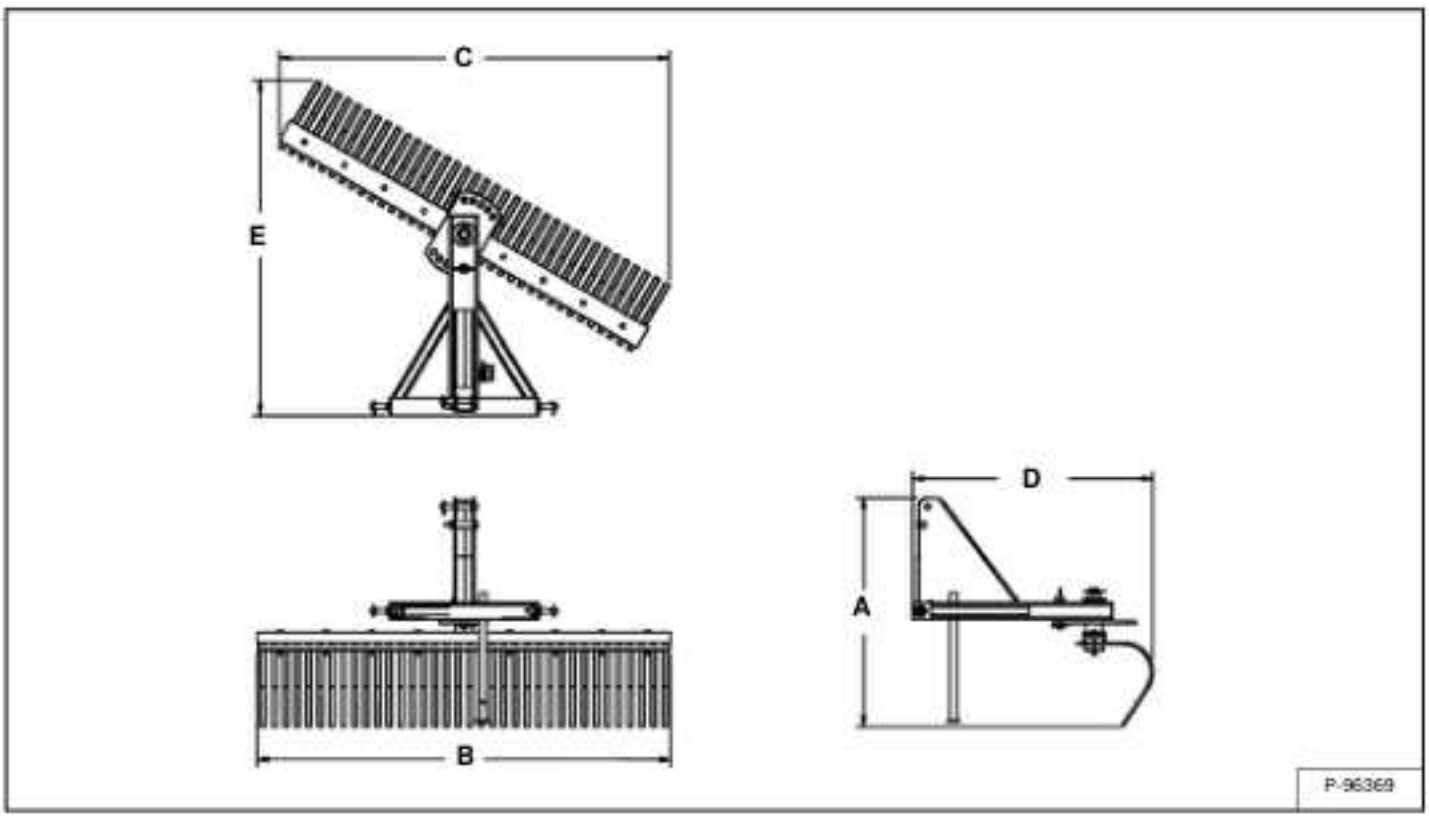
1. Pivot assembly.

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TINE RAKE 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	3TR60 (60 IN.)	3TR72 (72 IN.)	3TR84 (84 IN.)	3TR96 (96 IN.)
Height (Dim A)	39.1 in. (1011 mm)	39.1 in. (1011 mm)	39.1 in. (1011 mm)	39.1 in. (1011 mm)
Width (Blade Straight) (Dim B)	60 in. (1524 mm)	72 in. (1829 mm)	84 in. (2134 mm)	96 in. (2438 mm)
Width (Blade Fully Angled) (Dim C)	54.2 in. (1377 mm)	64.6 in. (1641 mm)	75.0 in. (1905 mm)	85.4 in. (2169 mm)
Length (Dim D)	41.8 in. (1062 mm)	41.8 in. (1062 mm)	41.8 in. (1062 mm)	41.8 in. (1062 mm)
Length (Blade Fully Angled) (Dim E)	46.6 in. (1184 mm)	49.6 in. (1260 mm)	52.6 in. (1336 mm)	55.6 in. (1412 mm)

Performance

DESCRIPTION	3TR60 (60 IN.)	3TR72 (72 IN.)	3TR84 (84 IN.)	3TR96 (96 IN.)
Operating Weight (Approx.)	245 lb. (111 kg)	270 lb. (122 kg)	295 lb. (134 kg)	320 lb. (145 kg)
Three-Point Hitch Category	Category I	Category I	Category I	Category I
Blade Positions (Forward / Rear)	5 / 5	5 / 5	5 / 5	5 / 5
Blade Grading / Backfill Angles	0° / 15° / 30°	0° / 15° / 30°	0° / 15° / 30°	0° / 15° / 30°
Tine Thickness	0.25 in. (6,4 mm)	0.25 in. (6,4 mm)	0.25 in. (6,4 mm)	0.25 in. (6,4 mm)
Jackstand	Yes	Yes	Yes	Yes

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

W-2001-1285

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 implement 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 implement.

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 implement safely under all conditions of the work area. Fasten seat belt securely when Roll-Over Protective Structure (ROPS) is up and locked. DO NOT wear the seat belt if ROPS is down.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the machine and implement 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 IMP-0208

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