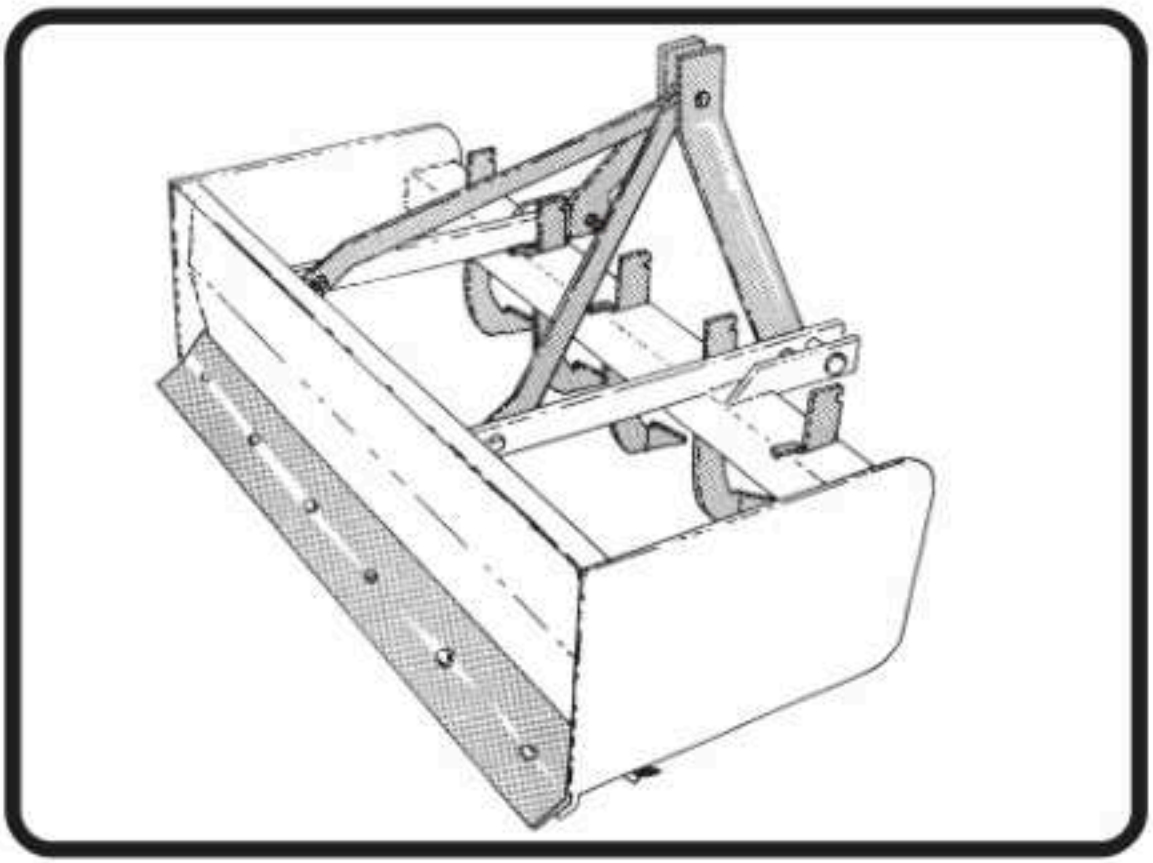
Bobcat®

# Operation & Maintenance Manual

# Box Blade

## 3BB48 - S/N A1FV00101 & Above
## 3BB60 - S/N A1FW00101 & Above
## 3BB72 - S/N A1FY00101 & Above



Ingersoll Rand
Compact Vehicle Technologies

6904724 (3-06)

Printed in U.S.A.

© Bobcat Company 2006

MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

# TABLE OF CONTENTS


**SAFETY SECTION ..... 1-1**
Safety Information ..... 1-2
Safety Decal Location ..... 1-4
Safety Decal Information ..... 1-5
Federal Laws And Regulations ..... 1-10

**INTRODUCTION SECTION ..... 2-1**

**ASSEMBLY SECTION ..... 3-1**
A-Frame ..... 3-2
Backfill Blade ..... 3-3
Scarifier Kit ..... 3-4

**OPERATION SECTION ..... 4-1**
Standard Equipment and Specifications ..... 4-3
Operator Requirements ..... 4-4
Tractor Requirements ..... 4-5
ROPS and Seat Belt ..... 4-5
Tractor Horsepower ..... 4-5
3-Point Hitch ..... 4-6
Front End Weight ..... 4-6
Getting on and Off the Tractor ..... 4-6
Boarding the Tractor ..... 4-7
Dismounting the Tractor ..... 4-7
5. Starting the Tractor ..... 4-8
6. Connecting the Implement to the Tractor ..... 4-9
6.1 Connecting the Box Blade ..... 4-9
7. Pre-Operation Inspection and Service ..... 4-10
7.1 Tractor Pre-Operation Inspection/Service ..... 4.10
7.2 Box Blade Pre-Operation Inspection/Service ..... 4-11
8. Driving the Tractor and Implement ..... 4-11
8.1 Starting the Tractor ..... 4-12
8.2 Brake and Differential Lock Setting ..... 4-13
8.3 Driving the Tractor and Implement ..... 4-13
9. Operating the Tractor and Implement ..... 4-14
9.1 Operating the Box Blade ..... 4-14
9.2 Shutting Down the Implement ..... 4-15
10. Disconnecting the Implement from the Tractor ..... 4-15
11. Box Blade Storage ..... 4-16
12. Transportation ..... 4-17
12.1 Transporting on Public Roadways ..... 4-18
12.2 Hauling the Tractor and Implement ..... 4-20
13. Troubleshooting ..... 4-22

**MAINTENANCE SECTION ..... 5-1**
Replacing Scarifier Points ..... 5-2
Torque Chart ..... 5-2



MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

## 1. Standard Equipment and Specifications

| | 3BB48" | 3BB60" | 3BB72" |
|---|---|---|---|
| Working Width | 48" | 60" | 72" |
| Height of Moldboard | 14" | 17" | 17" |
| Box Depth | 21-5/6" | 25" | 25" |
| Overall Depth | 35" | 35" | 35" |
| Overall Height | 34" | 35-1/2" | 35-1/2" |
| Overall Width | 48-5/8" | 60-5/8" | 72-5/8" |
| Side Sheet Thickness | 3/16" | 5/16" | 5/16" |
| Shank Penetration | 0-3" | 0-3" | 0-3" |
| Shank Size | 3/4" x 2-1/2" | 3/4" x 2-1/2" | 3/4" x 2-1/2" |
| Mainframe | 4" x 4" x 1/4" Wall | 4" x 4" x 1/4" Wall | 4" x 4" x 1/4" Wall |
| HP Rating (Max.) | 40 HP | 40 HP | 40 HP |
| Hitch Type | CAT I | CAT I | CAT I |
| Lower Hitch | Double Lug | Double Lug | Double Lug |
| Cuttng Edge | 3/8" x 3" | 1/2" x 6" | 1/2" x 6" |
| Number of Blades | 2 | 2 | 2 |
| Weight With Scarifiers (Approx.) | 262 lbs. | 446 lbs. | 505 lbs. |



MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

# 9. OPERATING THE TRACTOR AND IMPLEMENT

**THE OPERATOR MUST COMPLETELY UNDERSTAND HOW TO OPERATE THE TRACTOR AND IMPLE-MENT AND ALL CONTROLS BEFORE ATTEMPTING TO OPERATE.** The operator must read and under-stand the Safety and Operation Sections of the implement and tractor operator's manuals. These manuals must be read and explained to any operator who cannot read. Never allow someone to operate the imple-ment and tractor without complete operating instructions.

Before starting any operation, the operator must become familiar with the area to be worked in and any obstacles and hazards contained within to ensure safety to the operator, bystanders, and equipment. Special attention should be paid to foreign debris, rough terrain, steep slopes, and passersby and animals in the area.

## 9.1 Operating the Box Blade

When operating the Box Blade, a reasonable degree of care should be taken to avoid large obstacles that would create undue loads on both the blades and linkage which could result in damage to your Box Blade. Use "Float Position" while operating Box Blade. Do not use down pressure. Always operate at a slow speed.



**BACKFILLING AND SNOW REMOVAL**

The backfilling operation should be performed with the load in the center of the box blade. Avoid concentrated loads on end of the box blade. DO NOT ram into a load at any time, as this multiplies the force several times above normal and could result in damage to your blade. Perform all backfilling operations at slow speeds to prevent damage if box blade hits an object.

Moving snow with the box blade in backfill position is a very delicate operation and should be performed with extreme care and very slow speed. It is very easy to hit objects hidden in snow, or hit a snow bank that is too much material for your box blade to move. This could damage your box blade or mainframe. Caution in snow removal should be taken, as tractor could lose and regain traction causing surge in ground speed.

In all backfilling operations, the top link setting is very critical. Lengthen the top link so the box blade is tilted down at the rear in order that the box blade moves across the ground, not digging into it.

**NOTE:** *The warranty shall not apply to damage caused by misuse, abuse, or contact with obstructions*



MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

## REPLACING SCARIFIER POINTS

**WARNING** Make certain that you wear gloves and safety glasses. Chips can fly off hammer or punch and cause eye damage, loss of eyesight, or other injury.

Place Scarifier assembly in vise securely. Using a hammer and drift or punch, drive the worn point off.

Hammer the new point on securely. Using a hammer and punch, indent the point edge into the recess in side of scarifier.

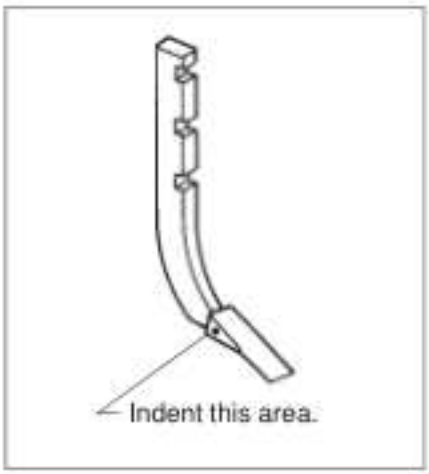



**FIGURE 1** Replacing Scarifier Points





MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

# SAFETY DECAL LOCATION




| ITEM | PART NO. | QTY | TYPE | DECAL DESCRIPTION |
|---|---|---|---|---|
| 1 | 999200 | 1 | Warning | Multi-Hazard/General |
| 2 | 7123956 | 1 | Ser Plt | 3BB72 |
| | 7123953 | 1 | Ser Plt | 3BB60 |
| | 7123950 | 1 | Ser Plt | 3BB48 |
| 3 | 00725746 | 1 | WARNING | Peligro |
| 4 | 6809831 | 1 | LOGO | BOBCAT |
| 5 | 6732489 | 2 | LOGO | BOBCAT |



MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

# INTRODUCTION






Box Blades fit a wide range of tractors. CAT I three-point hitch, 4" x 4" mainframe and double-lug lower hitch points help ensure performance and reliability. Shearing action of the material being worked is provided by two, reversible, high carbon steel cutting edges. One edge mounted inside the box and the other mounted on the back side allow the blade to be operated in forward or reverse. Maximum penetration in hard-packed material is accomplished by the standard scarifier kit which has a maximum working depth of 3".

**WARNING** At least 20% of the tractor's total weight must be on the front tires with the Box Blade lifted to provide adequate traction for safe steering under good conditions. Slow down on hills, rough terrain, and curves.

Front and rear, and left and right are determined by the normal direction of travel (the same as on your automobile).



MidWestTech | Bobcat 3BB48, 3BB60, 3BB72 Box Blade Operation & Maintenance Manual... Order the manual at mid-west-tech.com >