## OPERATOR'S MANUAL

# **BOX BLADES**

| BB4160

BB4178

| BB4278

BB4166

**■ BB4184** 

BB4284

**BB4172** 

**BB4196** 

**I BB4296** 



FIRONTIER

#### TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Frontier dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Owner's/Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the Warranty Registration located on the Frontier website.

#### TO THE OWNER:

Read this manual before operating your Frontier equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your selling dealer.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Frontier dealer has trained mechanics, genuine Frontier service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Frontier service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model:	Date of Purchase:
Serial Number: (see Safety Decal section for location	on)
Provide this information to your dealer to obtain corn	ect repair parts

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION,WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety.



This Safety-Alert Symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

Indicates that failure to observe can cause damage to equipment.

Indicates helpful information.

# Introduction ii

#### **TABLE OF CONTENTS**

TRODUCTION
PECIFICATIONS
FETY DECALS
FETY RULES
EALER INSTRUCTIONS
PERATION
VNER SERVICE
RTS CATALOG
DLT SIZE AND BOLT TORQUE CHART
ARRANTY
ARRANTY FOR PARTS



### **GENERAL INFORMATION**

The purpose of this manual is to assist you in operating and maintaining your Box Blade. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance.

These instructions have been compiled from field experience and engineering data. Some information may be general in nature, due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to

your particular situation.

The illustrations and data used in this manual were current at the time of printing. However, due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to right and left direction. These are determined by standing behind the tractor facing the direction of forward travel.

## Table of Contents

## **SPECIFICATIONS**

Model #	BB4160	BB4166	BB4172	BB4178	BB4278
Tailgate	Hinged, Floating				
Grading & Leveling	Fine, Precision				
3	Grading And Leveling				
Tractor	Category I	Category I	Category I	Category I & 2	Category I & 2
Compatibility	iMatch Compatible	iMatch Compatible	iMatch Compatible	iMatch & Quick Coupler Compatible	iMatch & Quick Coupler Compatible
Beam Type	Tubular Scarifier Beam				
Scarifier Shanks	Notched 4 Position				
Points	Heat Treated Points	Heat Treated Points	Heat Treated Points	Heat Treated Points	Heat Treated Points
Box Design	Low Back	Low Back	Low Back	Low Back	High Back
Hydraulic Opening	Hydraulically Oper- ated Scarifier Bar				
Hydraulic Kit	Pin Kit And Hydraulic Hose Kit Included				
Capacity (cu. ft.)	21.8	24	26.2	28.3	32
Tractor HP	25 to 50 HP	25 to 50 HP	25 to 50 HP	50 to 90 HP	50 to 90 HP
Cutting Edges	(2) 1/2" x 6"				
	reversible	reversible	reversible	reversible	reversible
Scarifier Shanks	(6) Replaceablev	(6) Replaceable	(6) Replaceablev	(8) Replaceable	(8) Replaceable
Beam Size	Main Beam				
	4" x 4" x 1/4"				
	Shank Beam				
	4" x 4" x 1/4"				
Beam Reinforcement	1/2" x 3/4" bar				
End Plate Thickness	3/8"	3/8"	3/8"	1/2"	1/2"
Working Width	60"	66"	72"	78"	78"
Height	20"	20"	20"	20"	20" Front 26" Rear
Depth	33"	33"	33"	33"	33"
Hitch Type	Category I iMatch Compatible	Category I iMatch Compatible	Category I iMatch Compatible	Category I & 2 iMatch & Quick	Category I & 2 iMatch & Quick
	P	P	r	Coupler Compatible	Coupler Compatible
Mast Design	Welded	Welded	Welded	Welded	Welded
	3/8" Plate	3/8" Plate	3/8" Plate	1/2" Plate	1/2" Plate
Assembly/Set-Up Time	30 min				
Operating Weight	725 lbs.	772 lbs.	815 lbs.	1016 lbs.	1160 lbs.
Shipping Weight	765 lbs.	812 lbs.	855 lbs.	1056 lbs.	1200 lbs.
Moldboard	3/16"v	3/16"	3/16"	1/4"	1/4"
Thickness					
Paint Color	Green	Green	Green	Green or Construction Yellow	Green or Construction Yellow

## **SPECIFICATIONS**

Model #	BB4184	BB4284	BB4196	BB4296
Tailgate	Hinged, Floating	Hinged, Floating	Hinged, Floating	Hinged, Floating
Grading & Leveling	Fine, Precision	Fine, Precision	Fine, Precision	Fine, Precision
	Grading And Leveling	Grading And Leveling	Grading And Leveling	Grading And Leveling
Tractor Compatibility	Category I & 2 iMatch & Quick Coupler Compatible			
Beam Type	Tubular Scarifier Beam	Tubular Scarifier Beam	Tubular Scarifier Beam	Tubular Scarifier Beam
Scarifier Shanks	Notched 4 Position	Notched 4 Position	Notched 4 Position	Notched 4 Position
Points	Heat Treated Points	Heat Treated Points	Heat Treated Points	Heat Treated Points
Box Design	Low Back	High Back	Low Back	High Back
Hydraulic Opening	Hydraulically Operated Scarifier Bar	Hydraulically Operated Scarifier Bar	Hydraulically Operated Scarifier Bar	Hydraulically Operated Scarifier Bar
Hydraulic Kit	Pin Kit And Hydraulic Hose Kit Included			
Capacity (cu. ft.)	30.5	34.5	34.9	39.4
Tractor HP	50 to 90 HP	50 to 90 HP	50 to 90 HP	50 to 90 HP
Cutting Edges	(2) 1/2" x 6"			
	reversible	reversible	reversible	reversible
Scarifier Shanks	(8) Replaceable	(8) Replaceable	(8) Replaceable	(8) Replaceable
Beam Size	Main Beam	Main Beam	Main Beam	Main Beam
	4" x 4" x 1/4"	5" x 5" x 1/4"	4" x 4" x 1/4"	5" x 5" x 1/4"
	Shank Beam	Shank Beam	Shank Beam	Shank Beam
	4" x 4" x 1/4"	5" x 5" x 1/4"	4" x 4" x 1/4"	5" x 5" x 1/4"
Beam Reinforcement	1/2" x 3/4" bar			
End Plate Thickness	1/2"	1/2"	1/2"	1/2"
Working Width	84""	84"	96"	96"
Height	20"	20" Front	20"	20" Front
		26" Rear		26" Rear
Depth	33"	33"	33"	33"
Hitch Type	Category I & 2 iMatch & Quick	Category I & 2 iMatch & Quick	Category I & 2 iMatch & Quick	Category I & 2 iMatch & Quick
	Coupler Compatible	Coupler Compatible	Coupler Compatible	Coupler Compatible
Mast Design	Welded	Welded	Welded	Welded
	1/2" Plate	1/2" Plate	1/2" Plate	1/2" Plate
Assembly/Set-Up Time	30 min	30 min	30 min	30 min
Operating Weight	1052 lbs.	1200 lbs.	1146 lbs.	1310 lbs.
Shipping Weight	1092 lbs.	1240 lbs.	1186 lbs.	1350 lbs.
Moldboard	1/4"	1/4"	1/4"	1/4"
Thickness				
Paint Color	Green or	Green or	Green or	Green or
	Construction Yellow	Construction Yellow	Construction Yellow	Construction Yellow



Our support email: ebooklibonline@outlook.com