



**Blue Diamond®**  
**Brush Cutter**  
**Operation and Maintenance Manual**  
**Covers extreme closed front**

Serial # 20800 to current (with grease fitting in drive)

To ensure warranty coverage please register your attachment at:  
<http://www.bluediamondattachments.com/warranty-registration/>

Within 30 days of purchase

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## Brush Cutter

### Document History

The table below lists all revisions of the Brush Cutter Operation and Maintenance Manual.

Document Revision	Summary of Changes	Publication Date
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	Third revision	8/8/12
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# Brush Cutter

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## Brush Cutter

### About this Manual

This manual contains information about the usage and maintenance required for the equipment. This document must be available for review by the operator before using the attachment to ensure proper safety, maintenance, and usage.

### Hazard Notices Used in this Manual

The following hazard notices are used in this document:

**NOTE:** Notes are used to indicate important information. This information may be repeated in other areas of the manual.

**CAUTION:** Cautions are used to indicate a potentially hazardous situation, which, if not avoided, may result in damage to the equipment or other property.

**WARNING:** Warnings are used to indicate a potentially hazardous situation, which, if not avoided, could result in serious injury or death.

**DANGER:** Danger is used to indicate a potentially hazardous situation, which, if not avoided, will result in serious injury or death.

### Terminology

**Prime Mover:** The Brush Cutter can be attached to many different pieces of equipment; therefore, the term “prime mover” will be used. A prime mover is any equipment, tractor, or skid steer providing power to the attachment.

## Safety

### Safety Notices

Before operating or conducting maintenance on this equipment, it is important to wear proper protection. Recommended safety equipment when operating and maintaining this equipment includes earplugs, eye protection, and a hard hat.

**NOTE:** Additional safety equipment may be required depending on the operating environment and worksite conditions.

Only qualified and trained personnel should operate, maintain, and service this attachment. Blue Diamond® recommends that you inspect this equipment regularly for leaks, cracks, or other conditions that may impair proper usage of the equipment. Verify that all repairs have been completed and inspected prior to using the attachment under load.

It is the responsibility of the user to follow all local, state, and federal safety regulations. Improper use of this equipment may result in personal injury, property damage, and/or damage to the equipment.

**NOTE:** Fasten the safety chain to your machine with very little slack.

**DANGER: DO NOT RAISE THE BACK OF THE CUTTER MORE THAN 12” OFF THE GROUND WHILE OPERATING THE ATTACHMENT. RAISING THE CUTTER DURING OPERATION MAY RESULT IN SERIOUS INJURY OR DEATH.**

### Modifications to Equipment

Any modifications made to this equipment may void any warranty and relieve the manufacturer of liability of any resulting injury or damage.

## **Brush Cutter**

### **About the Brush Cutter Attachment**

The Brush Cutter attachment is intended for use as a brush cutting and clearing tool. The primary use of the Brush Cutter attachment includes land clearing, landscaping, and grounds maintenance. Use of this equipment in any other manner is considered to be contrary to the intended use of the attachment.

There are two versions of the Brush Cutter: the Extreme Duty Brush Cutter and the Standard Duty Brush Cutter.

### **Extreme Duty Brush Cutter**

Travel faster and get a cleaner cut with this industrial-grade brush cutter designed for the serious user. The Extreme Brush Cutter features four swing-away blades and ultra-rugged construction. Cut five-inch (5") trees without hesitation or mow a field without plugging up. The new four-blade system, ultra-heavy construction and direct drive, combined with a protected reversible motor, allow you to cut the thickest brush with confidence. The larger capacity means less time in the field and cost savings in both time and energy.

The Brush Cutter attachment is vital in the landscaping, and grounds maintenance industries. This unique Brush Cutter is offered in a variety of sizes for a variety of applications.



**Figure 1 – Extreme Duty Closed Front Brush Cutter**

## Brush Cutter

### Attaching the Brush Cutter to the Prime Mover

**NOTE:** Before attempting to attach the Brush Cutter to the prime mover, verify that all hydraulic couplings are compatible.

**WARNING:** Improper attachment to the prime mover may cause personal injury.

**CAUTION:** All hydraulic connections must be clean and free of debris before making any connection.

1. Place the Brush Cutter attachment on a level surface.
2. Position and align the prime mover to the rear of the attachment, within proximity of the front of prime mover.
3. Insert and connect the prime mover into the attachment.
4. Connect the hydraulic lines from the attachment to the prime mover.
5. Close latches (or other locking mechanism) to secure the attachment to the prime mover.
6. Using the prime mover, raise the attachment and move the attachment to ensure hydraulic lines are clear of air and operate properly.

**CAUTION:** Hydraulics should operate in an even and smooth manner. Hydraulic movement that is not even and smooth may indicate that air is in the hydraulic lines.

7. Lower the attachment to ground level.
8. Inspect that the attachment is mounted properly and securely. If the attachment does not meet this requirement, follow the instructions to remove the Brush Cutter and re-attach using the instructions above.

### Removing the Brush Cutter from the Prime Mover

**WARNING:** Improper disconnection may result personal injury or damage to the attachment and prime mover.

**CAUTION:** All hydraulic connections must be clean and free of debris before disconnection.

1. Using the prime mover, lower the attachment to the ground.
2. To prevent contamination, remove any dirt and debris from the couplings. Disconnect the hydraulic connection between the attachment and the prime mover.

**NOTE:** Hydraulic connections must be disconnected before disengaging latches to prevent damage to the prime mover or the attachment.



3. Disengage the prime mover latches (or other locking mechanism) from the attachment.
4. Move the prime mover from the attachment.

## Brush Cutter

### Brush Cutter Operation

- Operate this attachment with a prime mover with an enclosed cab.
- Wear proper safety equipment as required by working conditions and local, state, and Federal laws.
- Never operate the Brush Cutter within 100 feet of people, animals, or damageable property. Clear the area of objects that could become projectiles, such as rocks, bottles, and construction debris.
- Never operate the Brush Cutter with the back more than 12" off the ground or where your view is obstructed.
- Never operate the Brush Cutter with any guards removed, including the motor cover.
- Never operate the Brush Cutter without the safety chain securely fastened to your machine.
- Disengage the Brush Cutter and shut off the engine before leaving the cab of your machine.
- Do not place hands or feet near the Brush Cutter while the machine is running.

**DANGER:** Keep all body parts away from the Brush Cutter when in use.

	<b>Eye and Ear Protection:</b> To help ensure your safety as a designated operator wear eye and ear protection.
	<b>Safety Helmet:</b> To help ensure your safety as a designated operator wear a safety helmet.



## Brush Cutter

### Equipment Inspection Schedule

We recommend that you inspect the equipment for damage and wear before use. Use the following list as a guideline during equipment inspection.

**WARNING:** Do not use hands to check for hydraulic leaks. Keep body parts away from leaking hydraulic lines and couplings that are under pressure.

**NOTE:** Shut off the prime mover and disengage the Brush Cutter before performing any maintenance.

### Daily Inspection

Inspect the Brush Cutter by performing a walk around daily before and after use. Use the following inspection checklist as a guideline.

- After the Brush Cutter has been attached, check that all latches or locks are closed.
- Check that all hydraulic fittings are tight and free of leaks.
- Check that all hydraulic lines are free of leaks, holes, or cracks. Replace as required.
- Check all hardware connections to the prime mover for damage or fatigue such as cracks or other structural flaws.
- Inspect the safety chain for damage.
- Inspect blades and bolts for wear, damage, and loosening.
- Check for wire or debris under the deck, remove any present. Inspect lower drive seal for leaks
- Clean debris from the motor and drive area
- Check that all guards and safety equipment are in good condition.

### Weekly Inspection (or 40 hours of use)

- Check blade bolts for correct torque (1440 foot/pounds)
- Check all bolts for tightness 3/8" bolts 50lbs (foot/pounds), 1/2" bolts 100lbs (foot/pounds) 3/4" bolts 140 (foot/pounds)
- 3/4" bolts 380 ft/lbs
- Inspect the deck for cracks, bends, or damage.
- Inspect discharge chains and replace any missing or broken chains.

### Monthly Inspection (or 250 hours of use)

- Inspect the blades for cracks, bends, or excessive wear.
- Check skid plates for wear.
- Inspect the bolts on the motor and drive, tighten if required.
- Check that all bolts are tight.
- Remove motor cover and grease drive unit using Shell Gadus red lithium S5 V100 2 grease ... or equivalent (10 pumps or until begins pushing out weep hole)



## Brush Cutter

### Inspection Checklist

- Are all safety notices and warning stickers in proper locations and visible?
- Are all safety guards properly installed and in good condition?
- Are there any visible hydraulic leaks?
- Are there any signs of grease leaking from drive seal under deck?
- Is there any wire or vines wound under the deck?
- Are any cracks visible in Brush Cutter structure?
- Are the blades worn, bent, or broken?
- Has all debris been removed from the motor and drive area?
- Has the prime mover been properly inspected for hydraulic leaks and proper tire inflation?
- Has the prime mover been properly maintained?



## Brush Cutter

**Table 1 - Parts List – Extreme Duty Brush Cutter**

Item Number	Description	Part No.	Qty.
1	Deck weldment 60"	203500	1
1	Deck weldment 72"	203505	1
2	Discharge chain back (4 link)	203045	42
2	Discharge chain front (4 link)	203045	43
3	Hydraulic motor 9.8 cubic inch (for 72" units)	203768	1
3	Hydraulic motor 6.0 cubic inch (for 60" units)	203763	
Not shown	Inspection cover	203008	1
Not shown	Inspection cover bolts	203009	2
Not shown	Motor cover	203005	1
7	Pivot bolt	203035	3 or 4
8	Pivot bolt nut	203030	3 or 4
17	Blade double edged 4" for 72"	203027	4
17	Blade double edged 4" for 60"	203028	3
19	Motor cover bolts	203006	6
20	Safety chain and clevis	203048	1
22	Motor to hose fitting		2
23	Hydraulic hose kit	203039	1
24	Hydraulic coupler male	224012	1
25	Hydraulic coupler female	224011	1
30	Direct drive housing	*	1
31	Direct drive shaft (spindle)	*	1
32	Bearing race (upper)	*	1
34	Drive bearing (upper)	*	1
36	Lower bearing seal	*	1
37	Motor flange	*	1
38	Blade carrier 60"	203043	1
38	Blade carrier 72"	203040	1
39	Chain retainer bar 60"	203050	1
39	Chain retainer bar 72"	203055	1
40	Flange bolt (star head)	203167	6
41	Housing bolts	*	6
42	Blade carrier bolts	203062	10
43	Direct drive assembly	203058	1
	* see figure 4 for drive detail		

## Brush Cutter

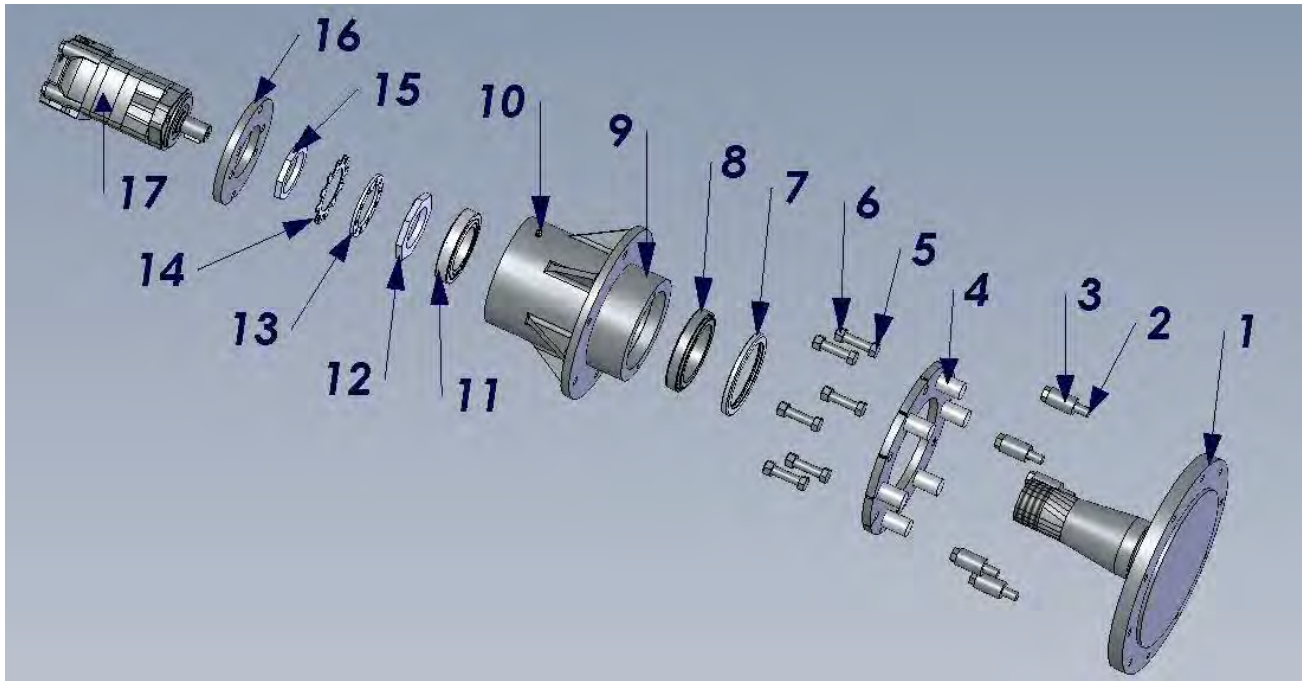


Figure 3 –Extreme Direct Drive Exploded View

Table 2 - Parts List – Extreme and Heavy Duty Direct Drive

Item Number	Description	Part No.	Qty.
17	Hydraulic motor 9.8 cubic inch (for 72" units)	203768	1
17	Hydraulic motor 6.0 cubic inch (for 60" units)	203710	1
16	Motor to drive flange	203150	1
15	Direct drive spindle nut, upper	203090	1
14	Direct drive star lock washer	203100	1
13	Direct drive lock ring	203095	1
12	Direct drive spindle nut, lower	203105	1
11	Direct drive bearing and race (upper)	203075	1
10	Grease zerk		1
Not shown	Housing bolt 3/4"	203056	6
Not shown	Housing nut 3/4" (included with bolt)		6
8	Lower bearing and race	203074	1
9	Direct Drive housing		1
4	Upper bearing seal protector	203134	1
2/3	Lower bearing seal protector (bushing and bolt)	203914	5
1	Direct drive spindle	203068	1
Not shown	Spindle seal retention ring	203087	1

# Brush Cutter

## Warning Decal Placement

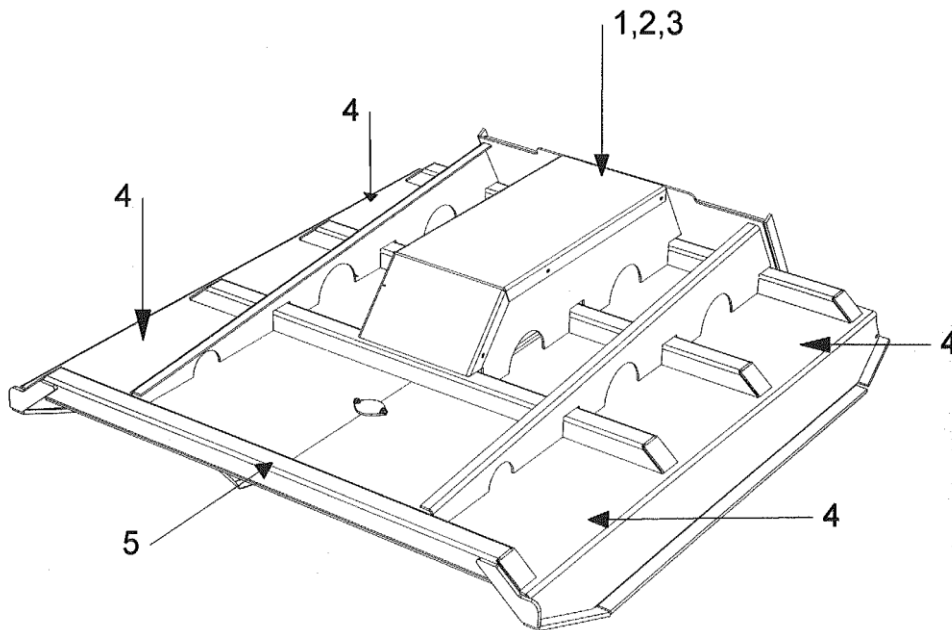


Figure 4 – Brush Cutter – Rear View

Table 3 - Parts List - Warning Decals

#	Part Name	Description	Part No.	Qty
1	Warning Decal	High Pressure Fluid Hazard	BD-01	1
2	Warning Decal	Read Owners Manual Before Operating	BD-02	1
3	Warning Decal	Do Not Operate Without Safety Chain In Place	BD-03	1
4	Warning Decal	Warning Keep Hands And Feet Away	BD-04	4
5	Warning Decal	DANGER Debris Discharge Area Stay Back 50 Feet	BD-05	1

Table 4 – Warning Stickers

<p><b>Warning Decal 1</b></p>	<p><b>Warning Decal 2</b></p>	<p><b>Warning Decal 3</b></p>	<p><b>Warning Decal 4</b></p> <p><b>Warning Decal 5</b></p>
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## **Brush Cutter**

### **Manufacturer's Limited Warranty**

BLUE DIAMOND® ATTACHMENTS, a manufacturer of quality attachments, warrants new BLUE DIAMOND® ATTACHMENTS products and/or attachments at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth by BLUE DIAMOND® ATTACHMENTS, LLC.

BLUE DIAMOND® ATTACHMENTS liability for any defect with respect to accepted goods shall be limited to repairing the goods at a BLUE DIAMOND® ATTACHMENTS designated location or at an authorized dealer location, or replacing them, as BLUE DIAMOND® ATTACHMENTS shall elect. The above shall be in accordance with BLUE DIAMOND® ATTACHMENTS warranty adjustment policies. BLUE DIAMOND® ATTACHMENTS obligation shall terminate twelve (12) months after the delivery of the goods to original purchaser.

This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the BLUE DIAMOND® ATTACHMENTS factory or authorized BLUE DIAMOND® ATTACHMENTS dealership or in any way so as in BLUE DIAMOND® ATTACHMENTS judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident beyond the Company recommended machine rated capacity.

### **Warranty Claim**

To submit a warranty claim, a return authorization from BLUE DIAMOND® ATTACHMENTS must be obtained. The failed part may then be returned. Tampering with the failed part may void the warranty. This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls, and pickup/delivery charges are the customers' responsibility.

### **Exclusions of Warranty**

Except as otherwise expressly stated herein, BLUE DIAMOND® ATTACHMENTS makes no representation or warranty of any kind, expressed or implied, AND MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO ITS MACHINERY AND/OR ATTACHMENTS ARE FIT FOR ANY PARTICULAR PURPOSE. BLUE DIAMOND® ATTACHMENTS shall not be liable for incidental or consequential damages for any breach or warranty, including but not limited to inconvenience, rental of replacement equipment, loss of profits or other commercial loss. Upon purchase, the buyer assumes all liability for all personal injury and property resulting from the handling, possession, or use of the goods by the buyer.

No agent, employee, or representative of BLUE DIAMOND® ATTACHMENTS has any authority to bind BLUE DIAMOND® ATTACHMENTS, LLC. to any affirmation, representation, or warranty concerning its machinery and/or attachments except as specifically set forth herein.

This warranty policy supersedes any previous documents.

## **Brush Cutter**

Blue Diamond® Attachments, a manufacturer of quality attachments, warrants new Blue Diamond® Attachments products and/or attachments at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth by Blue Diamond® Attachments, LLC. *To file a warranty claim, please contact your nearest Blue Diamond® Dealer or sales representative.*

### **Brush Cutters:**

The Blue Diamond® Brush Cutters have a One(1) year parts and labor warranty policy. Dis-assembly of the cutter in any way, including the blade carrier, housing components, and/or motor, may void the warranty. Please contact Blue Diamond® Attachments for instructions and authorization before taking apart to verify warranty.

### **Augers:**

Warranty coverage on Blue Diamond® Auger attachments is four(4) years on the Heavy Duty Series, and six(6) years on the Extreme Duty. Bent or Broken auger shafts are void from warranty. Coverage may be refused by Blue Diamond® Attachments if the unit appears to have been abused or misused.

### **Pallet Forks:**

Blue Diamond® Pallet Forks have a one(1) year warranty. If the forks are put in an application where the weight that is lifted exceeds the fork rating, all warranty coverage will be voided.

### **Grapples:**

All Grapples manufactured by Blue Diamond® Attachments have a one(1) year warranty. Faulty cylinders are covered by warranty. Bent tines and/or bent hydraulic cylinders are not covered nor implied by warranty.

### **Thumbs:**

Blue Diamond® Thumbs have a one(1) year warranty on manufacturing defects, including weld cracks and leaking cylinders. Bent cylinders and/or bent tines/frame are not covered by warranty.

### **Other Attachments:**

All other attachments that are not listed above, have a one(1) year warranty. This covers any manufacturing defect. Bent tines and/or bent cylinders are not covered. Any modification or alteration in any way may void the warranty on any piece. Blue Diamond® Attachments, LLC reserves the right to decline any warranty claim at their digression.

**\*\*WARRANTY MAY BE VOIDED IF ATTACHMENT IS ALTERED IN ANY WAY\*\***  
(May weaken unit and cause damage)

**Brush Cutter**



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