

**BEFORE OPERATING**  
**THE DAVCO™ BRUSH CUTTER**  
**ACCOMPANYING THIS MANUAL,**  
**PLEASE INSTALL**  
**THE INCLUDED CAUTION DECALS**  
**IN THE CAB OF THE BRUSH CUTTER**  
**CARRIER IN A HIGHLY VISIBLE AREA**

Davco BC504



## **WELCOME**

***Congratulations* on your purchase of a DAVCO® Manufacturing BC504 Model Brush Cutter. The DAVCO® Brush Cutter, when combined with an approved carrier, will provide you with unmatched durability, productivity and versatility. As an Owner or Operator, it is your responsibility to learn the capabilities and limitations of the DAVCO® BC-504 Model Brush Cutter to maximize both safety and performance. Before operating this DAVCO® product, make sure you read and understand this owner's manual as well as your carrier's operations manual. If you have any questions or comments regarding this or other DAVCO® products, don't hesitate to contact Barda® Equipment by phone @ (780) 532-0097, by fax @ (780) 532-7101 or by e-mail: [mulchers@telus.net](mailto:mulchers@telus.net).**



## **Personal & Property Safety**

- **Brush cutting, mowing, or other operations that can cause flying debris, can be a fire hazard in the carrier. With the engine off and cool, regularly inspect and clean the engine compartment and other areas where there may be hot or rotating parts. This should be performed as often as needed to prevent the combustion of this debris. Failure to do so could result in a fire, causing severe machine damage, injury or death.**
- **DO NOT operate DAVCO ® Brush Cutters within 200 yards of living things or items susceptible to damage from flying debris or falling trees.**
- **DO NOT operate without safety approved shielding (door). Proper Personal Protective Equipment (i.e. Safety glasses, hard hat, dust mask, etc.) is highly recommended. Failure to do so could result in damage, injury or death.**
- **When the disc is rotating, DO NOT tilt the DAVCO ® Brush Cutter so the knives are in line with the operator.**
- **Before servicing or leaving the cab: be sure the hydraulics are disengaged, the engine is shut off, and the discs have come to a complete stop. (Note: to prevent run-on, try to stall the disc into the ground or brush and disengage the hydraulics.)**
- **To remove debris from the brush cutter, the brush cutter must remain flat on the ground. Any other method may result in damage, injury or death.**
- **DO NOT straighten bent cutting knives. Straightening bent knives may cause cracking. Bent knives should be replaced with new DAVCO ® replacement knives.**

### **SPECIFICATIONS:**

**Attachment type: Industrial Brush Cutter**

**Model Number: BC504**

**Attachment Weight: 975 lbs.**

**Required Hydraulic Flow: 15-20 gpm**

**Required Hydraulic Pressure: 3000 psi**

### **PLEASE NOTE:**

- **It is the responsibility of the owner/operator to inspect and maintain parts and equipment for the utmost reliability and safety.**
- **Periodically check all nuts and bolts for proper tightness and excessive wear.**
- **For the owner/operator's convenience, DAVCO® Manufacturing has provided a parts list in this operator's manual for replacement parts. *Factory Replacement parts are to be used to maintain warranty.***
- **Before shutting off the hydraulic motor, throttle down to idle before disengaging the hydraulic valve. This helps to prevent cavitation in the hydraulic motor.**

## Quick-Attach Lock

Fig. 1-1



To properly mount the DAVCO™ Brush Cutter to the Carrier, hook the Quick-Attach of the Carrier to the Mount Plate (2), and lower the Lock Pins (1), through the holes on the Mount Plate. Fig.1-1 shows the Lock Pins in the open (unlocked) position.

Fig.1-2



Fig. 1-2 shows the Lock Pins in the closed (locked) position. Visually verify that the quick-attach Pins are properly engaged and securely coupled to the attachment (Note: Do not attempt to operate attachments with damaged or disengaged Lock Pins; equipment damage, property damage or serious injury could result).

## 2. Start Up

\*Starting the DAVCO® Brush Cutter: *Controls subject to change with each carrier, read your operator's manual.*

## 3. General Operations

Fig. 3-1



The BC-504 DAVCO® Brush Cutter is rated for cutting vegetation and trees up to 3 inches in diameter.

Fig. 3-2



For optimal performance, the DAVCO® Brush Cutter should be kept level with the ground during operation (see Fig. 3-2). **Caution:** *To prevent damage to your property, DAVCO® Brush Cutter, or yourself take care to avoid hidden obstacles such as animal carcasses, rocks, underground wires and other buried objects.*

Fig. 3-3



Figure 3-3 shows a common position for the DAVCO® Brush Cutter during operation. This cutting position is also a very effective method of mulching debris into finer pieces. *Note: excessive tilting of the Davco® Brush Cutter is not recommended, although slight tilting of the deck into the direction of travel can increase cutting efficiency.*

Fig. 3-4



Figures 3-4 demonstrates a method of brush cutting that is not recommended. Cutting in this manner throws debris outward and increases the likelihood of bending the cutting blades.

**\*Grease Daily:** Four or five pumps of quality grease from a hand pump grease gun, which meet the NLGI GC/LB lubricant requirements to *each bearing's* grease nipple once a day minimum.

\*Maintain a constant RPM on the DAVCO® Brush Cutter, using the travel speed of the carrier to determine the thoroughness of the cut. The slower that the carrier travels, the more complete the cut that the DAVCO® Brush Cutter will make, and the finer the mulch.

Fig. 3-5



Never expose the underside of the DAVCO® Brush Cutter to the operator's cab (Fig. 3-5) or to personnel within sight of the machine. Flying debris can cause equipment damage, serious injury or death. Never exit cab while loader arms are raised.

#### 4. Knife change

Fig. 4-1



Remove the disc inspection cover (1) in Fig. 4-1 to gain access to the top of the disc. Rotate the disc by hand until the first set of knife bolts are visible in the hole.

Fig. 4-2



To remove the knives, set the DAVCO® Brush Cutter on the stand or blocks, undo the nuts (as illustrated on Fig 4-2), drop the bolts, and then remove the knives and the pucks horizontally.

To install the knives, reverse the procedure, and torque the bolts to 250 ft/lb. **Note: Remember to re-torque the bolts after the first 8 hours of operation following a knife replacement and as required thereafter. For maximum Puck life put a coating of assembly grease around the outside of the puck.**

#### 5. Identification

Fig 5-1



Fig. 5-1 shows the identification of the DAVCO® Brush Cutter that includes the serial numbers and the model. *Please refer to these numbers when calling for technical support, or replacement parts.*

**CAUTION:** Move throttle to idle position, disengage power to brush cutter, engage park brake, shut off engine, remove key from ignition and wait until drive rotor and all moving parts have come to a complete stop before leaving the operator's seat!

**CAUTION:** Before performing any maintenance, shut off carrier and disconnect brush cutter. Failure to do so may result in death or injury.

## 6. Maintenance Tips

Fig. 6-1



**Spindle bolts** (A) shown on Fig. 6-1 must be torqued to **350 ft/lb**. Inspect periodically.

\***Greasing:** Four or five pumps of quality grease from a hand pump grease gun, which meet the NLGI GC/LB assemblygrease to *each bearing's* grease nipple (Item A in Fig. 5-1) once a day minimum. Grease escaping from the breather hole is normal.

\***Cutting Knives** are to be inspected *daily* for sharpness, excessive wear or bending (If used while bent, damage to the bolts, pucks and discs may occur). Davco® knives can be sharpened, or turned over. **DO NOT** straighten bent cutting knives.

**Note: Remember to re-torque the bolts after the first 8 hours of operation following a knife replacement and as required thereafter.**

\***Pucks** are to be inspected periodically and with every knife change for excessive wear. Rotate the pucks **1/3 of a turn** with each new knife and replace if necessary. **For maximum Puck life put a coating of assembly grease around the outside of the puck.**

\***Knife bolts** to be inspected with every knife change for excessive wear or bending. Bolts have to be changed if any damage is found. Torque the knife bolts to **250 ft/lbs**. **Re-torque the knife bolts after the first 8 hours of use, and as required thereafter.**

\***Stover nuts** to be inspected and changed with every third knife change because they may loose their self-locking ability.

\***Discs** need to be inspected at regular intervals. After excessive use cracks may appear, if this is the case the disc assemblies must be changed.

\***Housing Bearings:** With the disc rotating at a low RPM, listen for rumbling or grinding sounds in the housing, which could be a sign of possible bearing failure.

\***Spindle Nut** (item #3, on Fig. 7-1) torque to **200 in/lb**. Excessive preload on bearings will cause premature failure. Check pre-load every 200hrs.

**Part List: BC-504**

Item	Part #	Qty	Description
1	0166-063	1	Spindle Nut Lock Plate
2	821D	1	Spindle Housing
3	0166-064	1	Spindle Retaining Nut
4	820A	1	Spindle
5	880	1	Bearing and Seal Kit
6	809	1	Top Disc
7	0402-088	3	Puck
8	0402-091	3	Cutting Knife
9	0166-055	1	Knife Bolt Kit
10	894	1	Spindle Bolt Kit
11	849	1	Bottom Disc Assembly
12	320A	1	Spindle Bolt Guard
13	883	1	Spindle Nut Lock Plate Bolt Kit
14	0166-037	1	Disc Spacer
15	0402-087	1	Motor Pilot Ring
16	832C	1	Anti-Cavitation Housing
17	149	2	Washer
18	884	1	Motor Bolt Kit
19	875	1	Eaton Hydraulic Motor
20	287	1	Check Valve
21	210	8	Bolt
22	213	1	Grease Zerk
23	204	1	Grease Zerk
24	885	1	Anti-Cavitation Bolt Kit (hidden in Fig.7-2)
25	891	1	Plug
26	892	2	O-Ring (Not Shown In Fig.7-2)
27	238-504802W	1	Hydraulic Hose
28	238-504852W	1	Hydraulic Hose
29	0310-076	1	Quick Coupler Female
	0310-077	1	Quick Coupler Male
30	401	4	Adapter
31	343	1	Inspection Cover (See Fig. 4-1)