

# **BC604 EVO**

# THANK YOU FOR PURCHASING A CANADIAN MADE BRUSH CUTTER

Congratulations on your purchase of a DAVCO® Manufacturing Model BC604-EVO Brush Cutter. The DAVCO® Brush Cutter when combined with an approved carrier (Skid Steer or CTL) with 21-30 GPM's Auxiliary Hydraulic Pump Flow, it 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® Brush Cutter to maximize both safety and performance.

Before operating this DAVCO® product make sure you read and understand this owner's manual.

If you have any questions or comments regarding this or other DAVCO® products don't hesitate to contact by phone: (780) 532-0097, Toll Free (1-877-532-4555) or by e-mail: <a href="mailto:davco@bardaequipment.com">davco@bardaequipment.com</a>



# **PERSONAL & PROPERTY SAFETY**



Brush Cutting, Mulching, 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.

<u>DO NOT</u> operate DAVCO® Brush Cutters within 200 yards of living things or items susceptible to damage from flying debris or falling trees.

<u>DO NOT</u> operate without safety approved shielding (door). Proper Personal Protective Equipment (i.e., Safety glasses, hard hat, dust mask, etc.) is highly recommended.

Forestry rated door is required on your carrier.

When the disc is rotating, <u>DO NOT</u> 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 after disengaging the hydraulics.)

To remove debris from the brush cutter, the brush cutter must be disengaged and remain flat footed on the ground. Any other method may result in damage, injury, or death.

<u>DO NOT</u> straighten bent cutting knives. Straightening bent knives may cause cracking. Bent knives are to be replaced with new DAVCO® replacement blades.



# **SPECIFICATIONS:**

Attachment type: Industrial Brush Cutter Model Number: BC604-EVO

Attachment Weight: 1300 lbs. Required Hydraulic Flow: 21-30 gpm
Cutting Width: 58 inches Required Hydraulic Pressure: 3000 psi

Cutting Capacity: 4 inches Operation: True Direct Drive

Dimensions: Length 74" Width 64" Height 27" 3 Reversible Cutting Knives/Blades

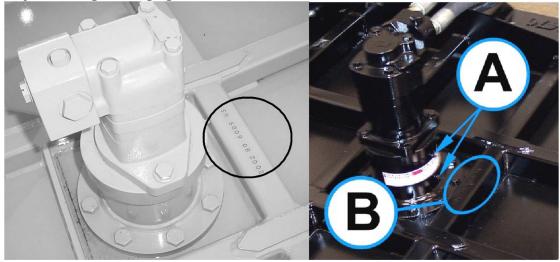
#### PLEASE NOTE:

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 ensure safety, reliability and to maintain warranty.

Before shutting off the hydraulic motor, gradually throttle down to idle before disengaging the hydraulic valve. This helps to prevent cavitation in the hydraulic motor. To help slow the cutting disc down it can be stalled into the ground or brush after being disengaged.



**MODEL IDENTIFICATION (Fig. 1-1)** 

Fig. 1-1 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.



## QUICK-ATTACH LOCK



#### **UNLOCKED POSITION (Fig. 2-1)**

Fig. 2-1 shows the Lock Plate in the open (unlocked) position.

To properly mount the DAVCO® Brush Cutter to the Carrier: first make sure the carrier is shut down and key is removed. Refer to your carrier's operation & safety manual for installation instructions.

Always verify visually that the quick-attach Pins and Lock Plates are properly engaged and securely coupled to the attachment. (Note: Do not attempt to operate attachments with damaged or disengaged Pins or Lock Plates; equipment damage, property damage or serious injury could result.)



#### **LOCKED POSITION (Fig. 2-2)**

Turn the Lock Plate to the closed (locked) position (see Fig. 2-2) and tighten the bolt with a 1 1/8" wrench. Check often and retighten as necessary.

# **START UP**

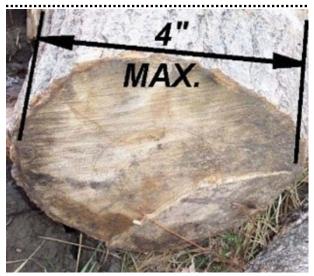
Starting the DAVCO® Brush cutter: With the carrier motor running slightly above idle engage hydraulics. Throttle up gradually to the desired RPM. Note: The DAVCO® Brush Cutter's anti-cavitation block helps to prevent cavitation in the hydraulic motor and prevents the DAVCO® Brush Cutter from operating in reverse. Consult your carriers' operations & safety manual for directions of your own application.





## **GENERAL OPERATIONS**

To prevent damage to your property, DAVCO® Brush Cutter/ Mulcher or yourself, inspect the work site before starting to cut, mow or mulch. Watching for and avoiding hidden obstacles such as animal carcasses, rocks, underground wires and other buried objects.



MAX RATING: DIAMETER (Fig. 3-1)
The BC604-EVO DAVCO® Brush Cutter is rated for cutting vegetation and trees up to 4 inches in diameter.

#### **MAINTAIN A CONSTANT RPM**

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 cut that DAVCO® Brush Cutter will make, and the finer the mulch.



**COMMON POSITION (Fig. 3-2)** 

Figure 3-2 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.



**FOR OPTIMAL PERFORMANCE (Fig. 3-3)** 

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



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#### **OPERATION WARNINGS (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.



#### **NEVER EXPOSE UNDERSIDE (Fig. 3-5)**

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

# **KNIFE CHANGE**



CAUTION: Before performing any maintenance, shut off the carrier and disconnect Brush Cutter. Failure to do so may result in death or injury.



REMOVE THE DISC INSPECTION COVER (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.



#### **REMOVE/INSTALL KNIVES (Fig. 4-2)**

To remove the knives, set the DAVCO® Brush Cutter on the stand or blocks, undo the nuts (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. for coarse thread or 300 ft./lbs for fine thread bolts.

Note: Remember to re-torque the bolts after the first 8 hours of operation after the knives have been replaced.

Recommended: Use a small amount of motor assembly lubricant on the puck wear surface.



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### **MAINTENANCE TIPS**



← Fig. 6-1

CAUTION: Before performing any maintenance, shut off the carrier and disconnect Brush Cutter. Failure to do so may result in death or injury.



SPINDLE BOLTS: (Item C in

Figure 6-1) must be torqued to 300 ft/lb. Inspect periodically.

**GREASE DAILY:** Four or five pumps of quality grease from a hand pump grease gun, which meet the NLGI GC/LB-EP2 requirements to each bearing's grease nipple once a day minimum.

**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.

<u>PUCKS:</u> 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 replaced if necessary. <u>For maximum Puck life put</u> 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 must be changed if any damage is found. Torque the knife bolts to 250 ft./lbs. for coarse thread or 300 ft. lbs. for fine thread bolts. Re-torque the knife bolts after the first 8 hours of use, and as required thereafter.

**FLANGE NUTS:** to be inspected and changed with every third knife change because they may lose their self-locking ability

<u>DISCS:</u> 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 must not exceed **200 in/lb.** Excessive preload on bearings will cause premature failure. Check pre-load every 200 hours.



## **PART LIST: BC604 EVO**

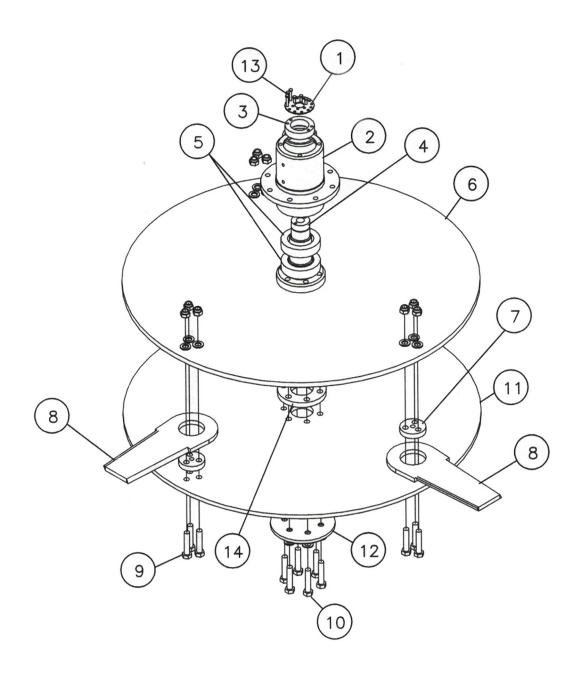
Refer to Figs. 7-1, 7-2 and 7-3 for the locations of the parts shown in the table below.

Item	Part #	Qty	Description
1	DV-225	1	Spindle Nut Lock Plate
2	DV-220G	1	Spindle Housing
3	DV-216D	1	Spindle Nut
4	DV-211K	1	Spindle
5	DV-089	1	Bearing & Seal Kit
6	DV-809	1	Top Disc
7	DV-303B	3	Puck
8	DV-314	3	Cutting Knife
9	DV-854	1	Knife Bolt Kit
10	DV-894	1	Spindle Bolt Kit
11	DV-810	1	Bottom Disc Assy
12	DV-320A-M	1	Spindle Bolt Guard
13	DV-208A KIT	1	Bolt Kit
14	DV-305A	1	Disc Spacer
15	DV-223*	1	Motor Pilot Ring*
16	DV-201C	1	Anti-Cavitation Housing
17	DV-149	4	Motor Washer
18	DV-209 KIT	1	Bolt Kit
19	DV-175	1	Hydraulic Motor
20	DV-207	1	Anti-Cavitation Cartridge
21	DV-210 KIT	1	Bolt Kit
22	DV-213*	1	Grease Nipple*
23	DV-204*	1	Grease Nipple*
24	DV-205A KIT	1	Allen Head Cap Screw
25	DV-206	1	M-ORB Hex Head Plug
26	DV-214	2	O-Ring *not shown
27	DV-559 or DV-560	2	Quick Coupler
28	DV-H814W7540	2	Hose
29	DV-746	1	Knife replacement Kit*
30	DV-003	2	Rod End Kit
31	DV-900B	1	Safety Bar
32	DV-121	1	Inspection cover (See Figure 4-1)

<sup>\*</sup> Not Shown

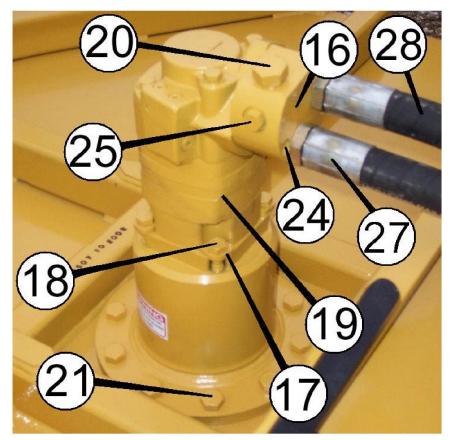


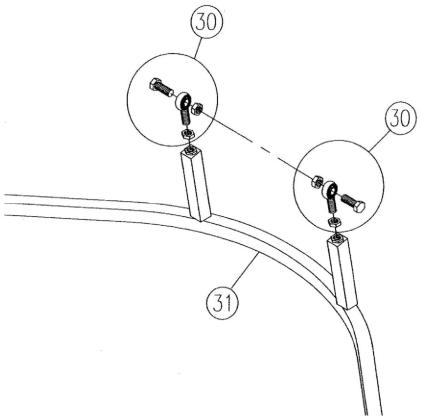
# FIGURE 7-1





# FIGURE 7-2





# **FIGURE 7-3**



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### **DAVCO® BRUSH CUTTERS WARRANTY REGISTRATION**

**IMPORTANT** 

This form must be complete and on file at DAVCO® Manufacturing Ltd., within 1 (one) week following the delivery of the attachment for any warranty claims to be considered.

To register warranty email to davco@bardaequipment.com

ATTACHMENT MODEL: BC604 EVO S	SERIAL NUMBER:			
PURCHASE DATE:////				
DEALER NAME:				
ADDRESS:				
CITY:REGION:PC	OSTAL/ZIP CODE:COUNTRY:			
OWNER NAME				
ADDRESS:				
	OSTAL/ZIP CODE:COUNTRY:			
	MODEL:			
TYPE OF BUSINESS:				
AVERAGE YEARLY USE (IN HOURS):# OF DAVCO® ATTACHMENTS OWNED:				
<u>DEALER/ OWNER ACKNOWLEDGEMENT:</u> The above equipment: complete with a copy of the operations manual explaining the operations, safety, maintenance, and warranty policy, was received by the purchaser.				
Owner SignatureDe	aler Signature:			
Date:				



To register warranty email to <a href="mailto:davco@bardaequipment.com">davco@bardaequipment.com</a>



The warranty herein set forth applies solely to the DAVCO® Brush Cutter.

Manufactured by **DAVCO® Manufacturing Ltd.** and is in lieu of all other warranties, expressed or implied. No person, agent, or dealer is authorized or empowered to give any other warranty or to assume any other liability on behalf of **DAVCO® Manufacturing Ltd.** The warranty is limited to the original purchaser only; no warranty is transferable to any subsequent owner.

**DAVCO® Manufacturing Ltd.** warrants the **DAVCO® Brush Cutter** against defects in material and workmanship under normal use and service for a period of One Year (12 Months) from the date of delivery and will repair or replace at **DAVCO® Manufacturing Ltd.**'s discretion, free of charge to the original purchaser, any part that our examination reveals to be defective in material or workmanship. The warranty includes labor based on a flat rate but does not include transportation costs, diagnosing time, clean up, or consequential damages. (Motor damage due to carrier hydraulic system contamination is not covered.)

- 1. Only Original Equipment parts are covered by this warranty.
- 2. Wear items are not covered against normal use.

**DAVCO®** Manufacturing Ltd. reserves the right to inspect components and or parts before any decision involving a warranty claim. In no case shall **DAVCO®** Manufacturing Ltd. grant a remedy that exceeds the purchase price of the component or part, and or the time to remove and or replace the component or part.

**DAVCO® Manufacturing Ltd.** reserves the right to make design changes without incurring any obligation to make such changes to previously manufactured equipment.

This warranty does NOT apply to damage caused by misuse, abuse, neglect (lack of lubrication), improper adjustment, accident, or improper application. Any modifications or alterations made to the equipment without written authorization from **DAVCO® Manufacturing Ltd.** will void this warranty.

NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY DAVCO MANUFACTURING LTD. EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OR LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. DAVCO® MANUFACTURING LTD. DISCLAIMS LIABILITY FOR DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND.

#### **WARRANTY LIMITATIONS:**

Modifications: The limited warranty covers the DAVCO® Brush cutter as built by DAVCO®

Manufacturing Ltd.

Carriers: CTL & Skid steers with adequate hydraulic flows & Forestry rated doors & cabs.





#### **WARRANTY POLICIES & CLAIM PROCEDURES**

{1} Ensure the completed "Warranty Registration Form" has been sent to DAVCO® Manufacturing Ltd. for the attachment in question.

DAVCO® Manufacturing Ltd. reserves the right to refuse all warranty claims on attachments for which the Warranty Registration Form has not been completed and returned to DAVCO® Manufacturing Ltd. at 9515-116 Street Grande Prairie, Alberta, Canada, T8V 5W3.

{2} Ensure the following information has been completed in section 1 of the Warranty Claim Form:

Date the form was completed

Model & serial number of the attachment

Number of hours in service, of the attachment, at the time of failure

Date of purchase

Name & address of the dealer (branch)

Name & address of the end-user (owner) of the attachment

- {3} Provide a detailed description of the failure in section 2 of the Warranty Claim Form Warranty Claim History Include operating conditions, possible reasons for failure, and information that would help in processing the warranty claim properly (attach an annex to the claim form if more space is required).
- {4} List all the defective parts in Section 3.

Ensure that copies of invoices for which the new parts were purchased for the purpose of the failure in question accompany the Warranty Claim Form.

All work orders, sublet invoices for labour and all other documents relative to the cost or repairs are to be submitted to DAVCO® Manufacturing Ltd. with your claim form. (Please be sure that sublet invoices refer to specific work on the serial number of the attachment in question.)

Only original manufacturer parts are covered under warranty.

- {5} Where possible, please provide photographs and/or drawings of the failure, defective parts, repairs/welding jobs done, etc. Please be sure to identify the photographs with the number of the claim and/or the serial of the attachment.
- {6} Recuperate all defective parts. Contact DAVCO's TM warranty department to obtain an RGA (Return Goods Authorization) and shipping address, before the destruction of or the shipment of defective parts (if requested) to DAVCO® Manufacturing Ltd. factory.

Make sure all parts are packaged securely and safely to avoid further damage to the parts, and that reference to both claim number and RGA number appear on all shipping documents.

Parts being returned for warranty consideration are to be sent freight prepaid.

DAVCO® Manufacturing Ltd. reserves the right to refuse all shipments for warranty consideration that arrive collect.

{7} The warranty claim should be signed clearly by the person completing the claim in the space marked "applicant."

