

# 10 INCH VACUUM SHREDDER

## OWNER'S MANUAL

# DL10

570cc Briggs & Stratton®

P/N: 78449-00

Revision 20230223

Serial Range: N01312 - Current

Companion to P/N: 78506-00



[BEARCATPRODUCTS.COM//](http://BEARCATPRODUCTS.COM//) 888.625.4520

ENGLISH



WARNING: Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



# Before You Begin

## DEAR Crary Bear Cat® CUSTOMER

Thank you for purchasing an Crary Bear Cat product. The Crary Bear Cat line is designed, tested, and manufactured to give years of dependable performance. To keep your machine operating at peak efficiency, it is necessary to adjust it correctly and make regular inspections. The following pages will assist you in the operation and maintenance of your machine. Please read and understand this manual before operating your machine.

If you have any questions or comments about this manual, please call us toll-free at 888-625-4520.

If you have any questions or problems with your machine, please call or write your local authorized Crary Bear Cat dealer.

This document is based on information available at the time of its publication. Crary Bear Cat is continually making improvements and developing new equipment. In doing so, we reserve the right to make changes or add improvements to our product without obligation for equipment previously sold.

## IMPORTANT WARRANTY REGISTRATION

IF YOU HAVE NOT REGISTERED YOUR CRARY BEAR CAT PRODUCT, PLEASE DO SO TODAY. TO REGISTER YOUR CRARY BEAR CAT PRODUCT ON-LINE AT [HTTPS://WWW.BEARCATPRODUCTS.COM/SUPPORT/PRODUCT-REGISTRATION/](https://www.bearcatproducts.com/support/product-registration/) OR CALL OUR CUSTOMER SERVICE LINE AT (888) 625-4520 FOR ASSISTANCE IN REGISTRATION.

## CARB Preemption Statement

Your Crary Industries (Crary) gasoline or diesel fueled engine powered equipment (Equipment) is certified and compliant to applicable U.S. Environmental Protection Agency (EPA) standards. Your Crary Equipment matches an Equipment Type “preempted” from California Air Resources Board (CARB) jurisdiction. Farm and Construction equipment such as your Crary Equipment is beyond CARB’s authority to regulate and therefore subject only to EPA standards in the US, including in California. Please reference the CARB List to Determine Preempt Off-Road Applications on <http://www.arb.ca.gov/msprog/offroad/preempt.htm> for more information. As the owner, you must still follow all engine and Equipment operating, maintenance and repair instructions. Other local use or national standards and registration requirements, such as the CARB Portable Equipment Registration Program may apply.

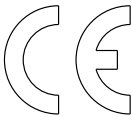
## IDENTIFICATION NUMBER LOCATION

Your machine will have a vehicle identification number (VIN). VINs are located on the left side of the trailer frame near the hitch. They are 17-digit numbers of the format: 5VJAA001XXWXXXXXX. For the exact location of the VIN, see the parts manual available at [bearcatproducts.com/Product-Support/Find-A-Product-Manual](http://bearcatproducts.com/Product-Support/Find-A-Product-Manual).

Record your identification number in the space provided.

## VEHICLE IDENTIFICATION NUMBER

MANUFACTURED BY/FABRIQUE PAR: CRARY INDUSTRIES, INC.	
FABRIQUE/MPR'D DATE: PNBY/GVWR: PNBE/IGARR:	PNL/TYPE: JANTE/REM: PRESS DE GONF A FROID/COLD INFL:
THIS VEHICLE CONFORMS TO ALL APPLICABLE STANDARDS PRESCRIBED UNDER THE UNITED STATES AND CANADIAN MOTOR VEHICLE SAFETY REGULATIONS IN EFFECT ON THE DATE OF MANUFACTURE. CE VEHICULE EST CONFORME A TOUTES LES NORMES QUI LUI SONT APPLICABLES EN VERTU DU REGLEMENT SUR LA SECURITE DES VEHICULES AUTOMOBILES DES ETATS UNIS ET DU CANADA EN VIGUEUR A LA DATE DE SA FABRICATION.	
V. I. N. / N. I. V.: 5VJAA001--W--XXXX	TYPE/TYPE DE VEHICULE: TRA/REM

	MANUFACTURED BY CRARY INDUSTRIES INC WEST FARGO, NORTH DAKOTA 58078 U.S.A.
	DATE OF MFG:
	GVWR:
	MODEL:
	V. I. N.: 5VJAA001--W--XXXX

## HOW TO CONTACT Crary Bear Cat

ADDRESS	PHONE	E-MAIL	HOURS
237 NW 12th Street P.O. Box 849 West Fargo, ND 58078	888-625-4520 701-282-5520 Fax: 701-282-9522	sales@bearcatproducts.com service@bearcatproducts.com	Monday - Friday 8 a.m. to 5 p.m. Central Time

## LIMITED WARRANTY

This warranty applies to all Crary® Bear Cat® Outdoor Power Equipment manufactured by Crary Industries, Inc. and does not include gas engine or electric powered pressure washers under the Crary Bear Cat brand. See Crary Bear Cat Pressure Washer Limited Warranty for complete warranty details on those products.

Crary Industries, Inc. warrants to the original owner each new Crary Bear Cat product to be free from defects in material and workmanship, under normal use and service. The warranty shall extend, from date of purchase, three years (U.S. and Canada only [two years outside U.S. and Canada]) for Consumer use of the product, one year for Commercial applications and six months for Rental applications. Replacement parts and accessories are warranted for 90 days from date of installation. Batteries for Inverters and Generators are warranted for 90 days from the date of purchase.

“Consumer” defined as: Complete unit for personal, residential, or non-income producing use.

“Commercial” defined as: Complete unit for commercial, institutional, property management, agricultural, horticultural or income producing use.

“Rental” defined as: Complete unit for rental purposes to produce income.

The product is warranted to the original owner by either a completed warranty registration on file at Crary Industries, Inc. and/or proof of sale. Warranty coverage begins on the date of purchase. The warranty registration can be registered on-line by visiting [bearcatproducts.com/Product-Support/Product-Registration](http://bearcatproducts.com/Product-Support/Product-Registration).

In the event of a failure, return the product, at your cost, along with proof of purchase to the selling Crary Bear Cat dealer. Crary Industries, Inc. will, at its option, repair or replace any parts found to be defective in material or workmanship. Warranty on any repairs will not extend beyond the product warranty. Repair or attempted repair by anyone other than an authorized Crary Bear Cat dealer as well as subsequent failure or damage that may occur as a result of that work will not be paid under this warranty. Crary Industries, Inc. does not warrant replacement components not manufactured or sold by Crary Industries, Inc.

1. This warranty applies only to parts or components that are defective in material or workmanship.
2. This warranty does not cover normal wear items including, but not limited to: batteries, bearings, belts, pulleys, filters, chipper blades, shredder knives.
3. This warranty does not cover normal maintenance, service, or adjustments.
4. This warranty does not cover depreciation or damage due to misuse, negligence, accident, or improper maintenance.
5. This warranty does not cover damage due to improper setup, installation, or adjustment.
6. This warranty does not cover damage due to unauthorized modifications of the product.
7. Engines are warranted by the respective engine manufacturer and are not covered by this warranty.

Crary Industries, Inc. is not liable for any property damage, personal injury or death resulting from the unauthorized modification or alteration of an Crary Bear Cat product or from the owner's failure to assemble, install, maintain, or operate the product in accordance with the provisions of the Owner's manual.

Crary Industries, Inc. is not liable for indirect, incidental, or consequential damages or injuries including but not limited to loss of crops, loss of profits, rental of substitute equipment or other commercial loss. This warranty gives you specific legal rights. You may have other rights that may vary from area to area.

Crary Industries, Inc. makes no warranties, representations or promises, expressed, or implied as to the performance of its products other than those set forth in this warranty. Neither the dealer nor any other person has any authority to make any representations, warranties or promises on behalf of Crary Industries, Inc. or to modify the terms or limitations of this warranty in any way. Crary Industries, Inc., at its discretion, may periodically offer limited, written enhancements to this warranty.

**CRARY INDUSTRIES, INC. RESERVES THE RIGHT TO CHANGE THE DESIGN AND/OR SPECIFICATIONS OF ITS PRODUCTS AT ANY TIME WITHOUT OBLIGATION TO PREVIOUS PURCHASERS OF ITS PRODUCTS.**

# TABLE OF CONTENTS

<b>1</b>	<b>SAFETY</b> .....	<b>1</b>
	1.1 SAFETY ALERT SYMBOL .....	1
	1.2 FIRE HAZARD INFORMATION .....	1
	1.3 BEFORE OPERATING .....	1
	1.4 OPERATION SAFETY .....	2
	1.5 MAINTENANCE/STORAGE SAFETY .....	2
	1.6 SAFETY DECALS .....	3
	1.7 SAFETY DECAL LOCATIONS .....	4
<b>2</b>	<b>ASSEMBLY</b> .....	<b>5</b>
	2.1 ATTACH VACUUM HOSE .....	5
	2.2 ATTACH DISCHARGE TUBE .....	6
	2.3 ADD OIL TO ENGINE .....	6
	2.4 FILL THE FUEL TANK .....	6
<b>3</b>	<b>FEATURES &amp; CONTROLS</b> .....	<b>7</b>
<b>4</b>	<b>OPERATION</b> .....	<b>8</b>
	4.1 ATTACHING .....	8
	4.2 STARTING RECOIL MODELS .....	8
	4.3 STOPPING THE MACHINE .....	8
	4.4 VACUUMING OPERATION .....	8
	4.5 VACUUMING SAFETY & TIPS .....	8
	4.6 TRANSPORTING .....	8
<b>5</b>	<b>SERVICE &amp; MAINTENANCE</b> .....	<b>9</b>
	5.1 MAINTENANCE SCHEDULE .....	9
	5.2 CHANGE OIL .....	9
	5.3 REPLACING THE HOSE .....	9
	5.4 REPLACING THE WEAR LINER .....	10
	5.5 CLEARING A PLUGGED FAN .....	10
	5.6 CLEARING THE INLET HOSE .....	10
	5.7 LUBRICATION .....	11
<b>6</b>	<b>TROUBLESHOOTING</b> .....	<b>12</b>
<b>7</b>	<b>SPECIFICATIONS</b> .....	<b>13</b>
	7.1 BOLT TORQUE .....	14
<b>8</b>	<b>PARTS &amp; OPTIONS</b> .....	<b>15</b>
	8.1 REPLACEMENT PARTS .....	15
	8.2 OPTIONS .....	15

# 1 SAFETY

## Section

### 1.1 SAFETY ALERT SYMBOL



The Owner/Operator's manual uses this symbol to alert you of potential hazards. Whenever you see this symbol, read and obey the safety message that follows it. Failure to obey the safety message could result in personal injury, death or property damage.



#### DANGER



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



#### WARNING



Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.



#### CAUTION



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

### 1.2 FIRE HAZARD INFORMATION

Federal, state, and local laws may prohibit the operation of an internal combustion engine using hydrocarbon fuels on any forest covered, brush covered or grass covered land or on land covered with grain, hay or other flammable agricultural crops, without an engine spark arrestor in continuous effective working order.



The engine on your power equipment, like most outdoor power equipment, is an internal combustion engine that burns gasoline or diesel fuel (hydrocarbons). If operating your power

equipment in affected areas, it must be equipped with a spark arrestor in continuous effective working order. The spark arrestor must be attached to the engine exhaust system in such a manner that flames or heat from the system will not ignite flammable material.

Failure of the owner/operator of the equipment to comply with federal, state, and local laws may subject him or her to fines and/or other penalties. Contact your local fire marshal or forest service for specific information about which regulations apply in your area.

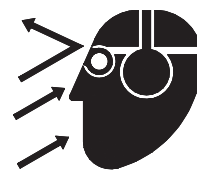
The standard muffler installed on the engine is spark arrestor capable. Spark arrestors require regular maintenance. See the Service & Maintenance section of this manual for more information.

Contact local fire authorities for laws or regulations regarding fire prevention requirements.

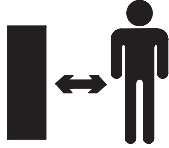
### 1.3 BEFORE OPERATING



1. Read and understand this owner's manual. Be completely familiar with the controls and the proper use of this equipment.
2. Familiarize yourself with all of the safety and operating decals on this equipment and on any of its attachments or accessories.
3. Keep safety decals clean and legible. Replace missing or illegible safety decals.
4. Obtain and wear safety glasses and use hearing protection at all times when operating this machine.
5. Avoid wearing loose fitted clothing. Never operate this machine while wearing clothing with drawstrings that could wrap around or get caught in the machine.
6. Do not operate this machine if you are under the influence of alcohol, medications, or substances that can affect your vision, balance or judgement. Do not operate if tired or ill. You must be in good health to operate this machine safely.



7. Do not operate this equipment in the vicinity of bystanders. Keep the area of operation clear of all persons, particularly small children. It is recommended that bystanders keep at least 50 feet (15 meters) away from the area of operation.



8. Do not allow children to operate this equipment.
9. Use only in daylight or good artificial light.
10. Do not run this equipment in an enclosed area. Engine exhaust contains carbon monoxide gas, a deadly poison that is odorless, colorless and tasteless. Do not operate this equipment in or near buildings, windows or air conditioners.
11. Always use an approved fuel container. Do not remove gas cap or add fuel when engine is running. Add fuel to a cool engine only.
12. Do not fill fuel tank indoors. Keep open flames, sparks, smoking materials and other sources of combustion away from fuel.
13. Do not operate machine without shields in place. Failure to do so may cause serious injury or death.
14. Keep all guards, deflectors, and shields in good working condition.
15. Before inspecting or servicing any part of this machine, shut off the machine and make sure all moving parts have come to a complete stop. Disconnect the battery and remove the ignition key where applicable.
16. Check that all screws, nuts, bolts, and other fasteners are secured, tightened and in proper working condition before starting the machine.
17. Do not transport or move machine while it is operating or running.

5. Check rotor housing to verify it is empty before starting the machine.
6. The fan will continue to rotate after being disengaged. Shut off the machine and make sure all moving parts have come to a complete stop before inspecting or servicing any part of the machine. Disconnect the battery and remove the ignition key if applicable.
7. When feeding material into machine, do not allow metal, rocks, bottles, cans or any other foreign material to be fed into the machine.
8. Ensure debris does not blow into traffic, parked cars, or pedestrians.
9. Keep the machine clear of debris and other accumulations.
10. Do not allow processed material to build up in the discharge area. This may prevent proper discharge and can result in kickback of material through the feed opening.
11. If the machine becomes clogged, the rotor strikes any foreign object, or the machine starts vibrating or making an unusual noise, shut off machine immediately and make sure all moving parts have come to a complete stop. Disconnect the battery and remove the ignition key if applicable. After the machine stops: A) Inspect for damage, B) Replace or repair any damaged parts, and C) Check for and tighten any loose parts.
12. On electric start models, disconnect cables from battery before doing any inspection or service. Remove key.
13. Check rotor hub bolts for proper torque after every 8 hours of operation. Check rotor integrity every 8 hours of operation. Failure to do so may cause poor performance, damage or personal injury and will void the machine warranty.

### 1.4 OPERATION SAFETY

1. Always stand clear of discharge area when operating this machine. Keep face and body away from feed and discharge openings.
2. Keep hands and feet out of feed and discharge openings while machine is operating to avoid serious personal injury. Stop and allow machine to come to a complete stop before clearing obstructions.
3. Set up your work site so you are not endangering traffic and the public. Take great care to provide adequate warnings.
4. Do not climb on machine when operating. Keep proper balance and footing at all times.



### 1.5 MAINTENANCE/STORAGE SAFETY

1. Before inspecting, servicing, storing, or changing an accessory, shut off the machine and make sure all moving parts have come to a complete stop. Disconnect the battery and remove the ignition key where applicable.
2. Replace any missing or unreadable safety decals. Refer to the safety decal section for part numbers.
3. Allow machine to cool before storing in an enclosure.
4. Store the machine out of reach of children and where fuel vapors will not reach an open flame or spark.

5. Never store this machine with fuel in the fuel tank inside a building where fumes may be ignited by an open flame or spark. Ignition sources can be hot water and space heaters, furnaces, clothes dryers, stoves, electric motors, etc.
6. Drain the fuel and dispose of it in a safe manner for storage periods of three months or more.

**1.6 SAFETY DECALS**

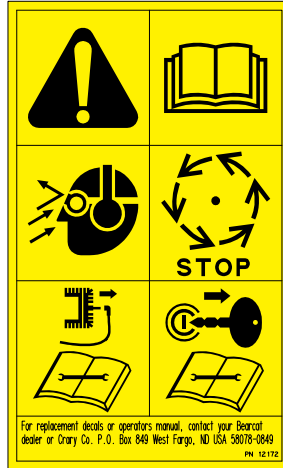
See Section 1.7 for decal locations. Familiarize yourself with all of the safety and operating decals on the machine and the associated hazards. See the engine owner’s manual or contact the engine manufacturer for engine safety instructions and decals.

**1 PN 12172**

Read and understand this owner/operators manual. Be completely familiar with the controls and the proper use of this equipment

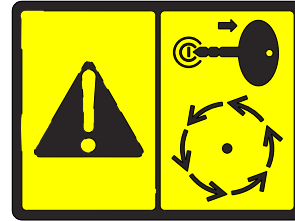
Obtain and wear safety glasses and use hearing protection at all times when operating this machine.

Before inspecting or servicing any part of this machine, shut off power source, remove the key, disconnect spark plug wire from spark plug and make sure all moving parts have come to a complete stop.



**4 PN 18993-00**

Do not remove cover unless key is removed and all moving parts have stopped. Use access for cleanout or inspection only. Do not operate machine with access cover removed.



**2 PN 12173**

Do not operate this equipment in the vicinity of bystanders. Do not allow children to operate this equipment. Always stand clear of discharge area when operating this machine. Keep face and body away from discharge areas.



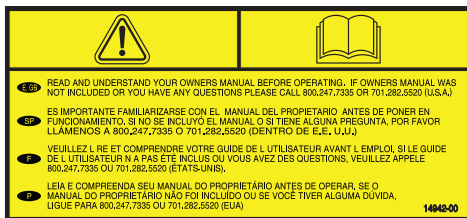
**5 PN 33883-00**

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.



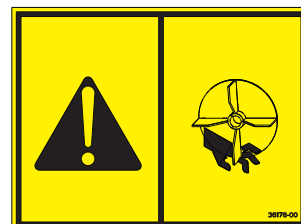
**3 PN 14942-00**

Read and understand your owners manual before operating. If owners manual was not included or you have any questions, please call 800.247.7335 or 701.282.5520 (U.S.A.).



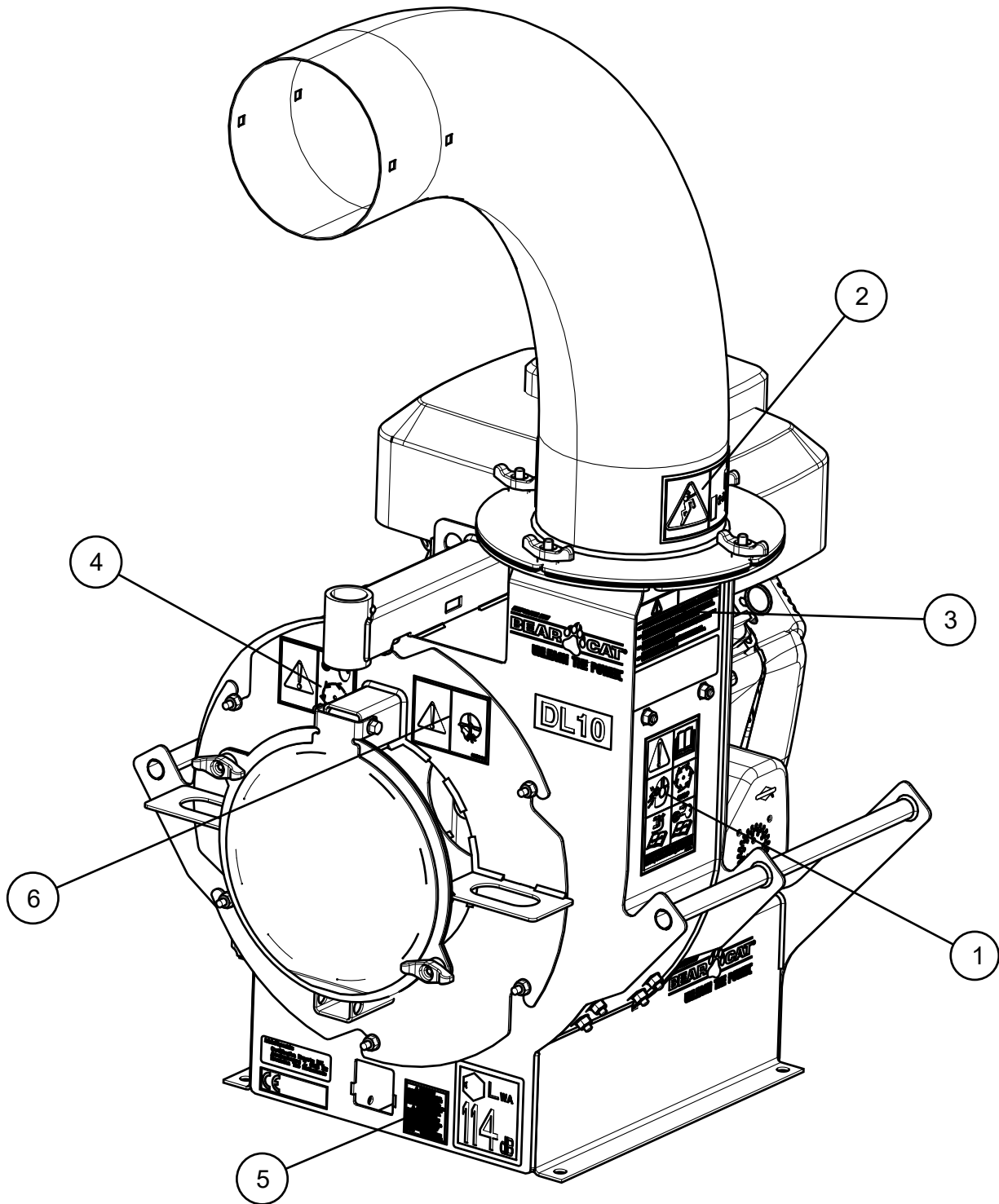
**6 PN 36176-00**

Keep hands and any other body part out of the fan housing while machine is operating to avoid serious injury or death. Stop and allow machine to come to a complete stop before clearing obstructions.



**1.7 SAFETY DECAL LOCATIONS**

The numbers below correspond to the decals in Section 1.6. Make certain that all safety and operating decals on this machine are kept clean and in good condition. Decals that need replacement must be applied to their original locations.



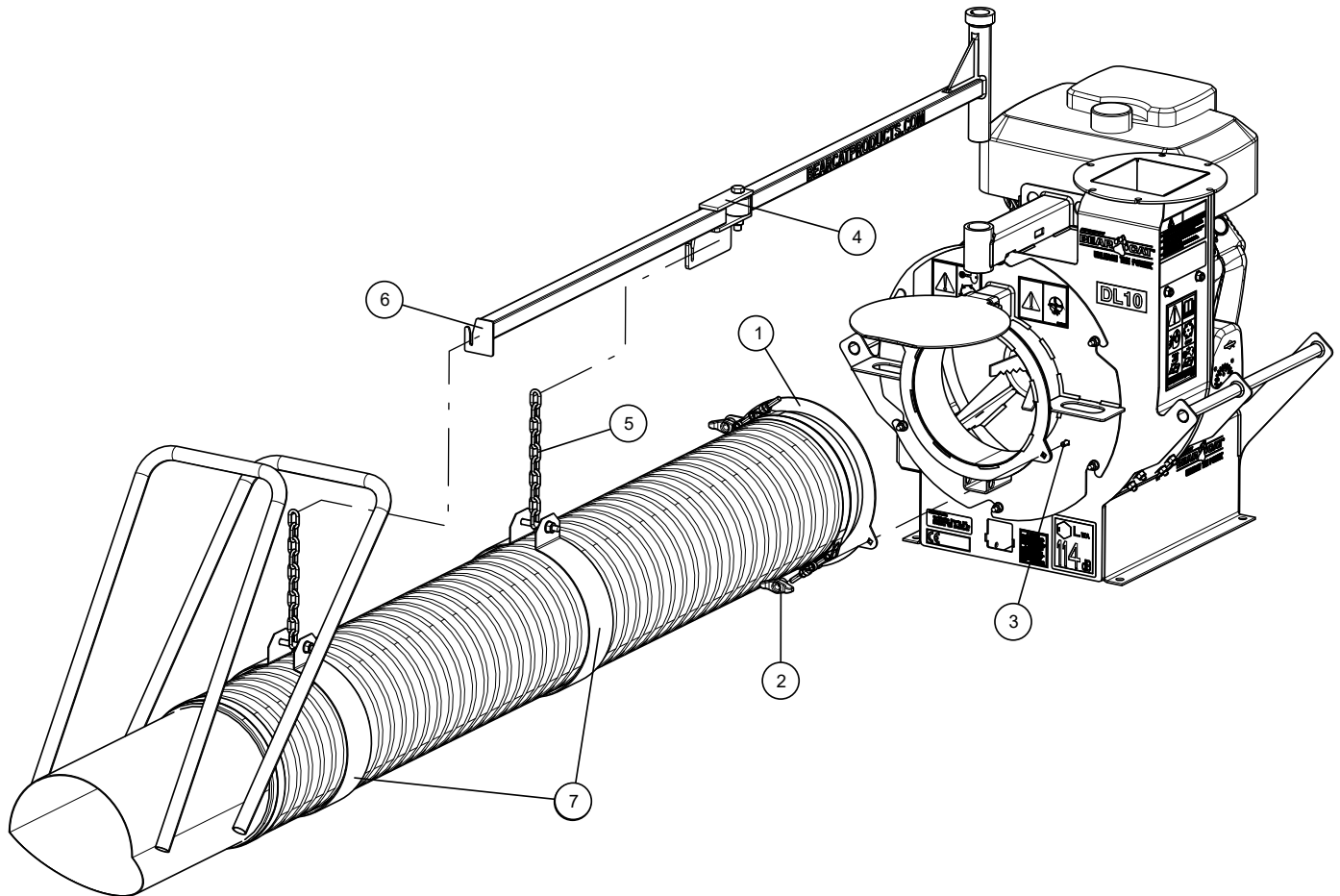
# 2 ASSEMBLY

## Section

 **WARNING**   
If any bolts or nuts are dropped in the machine, be sure to remove them before starting the machine.

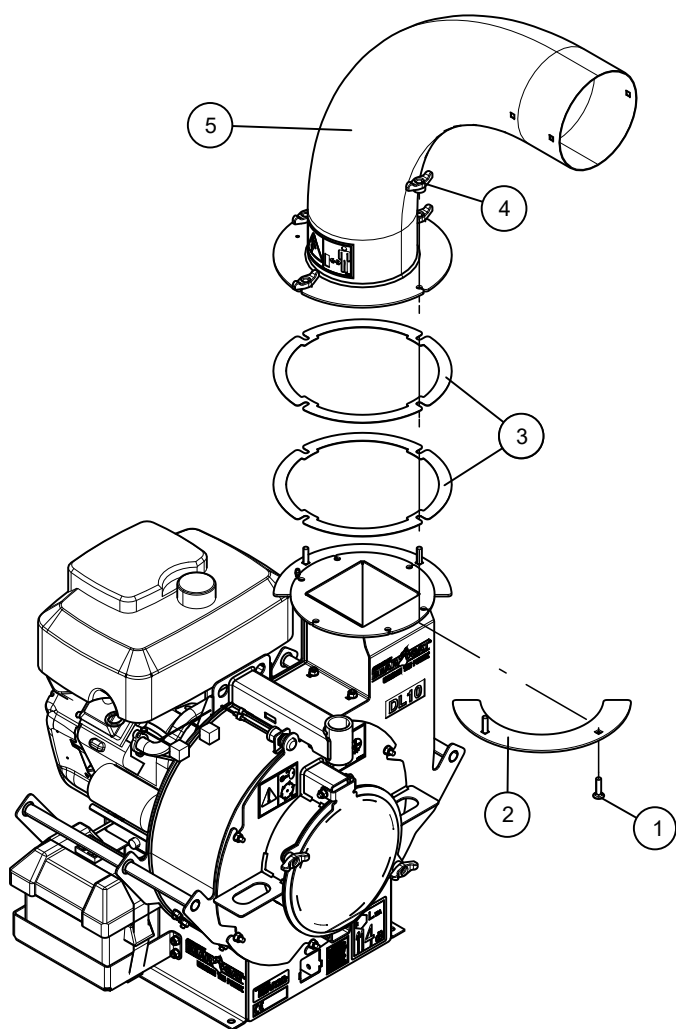
### 2.1 ATTACH VACUUM HOSE

1. Attach the hose assembly (1) to the fan intake weldment with the two provided knobs (2) and 5/16" x 3/4" carriage bolts (3).
2. Insert the hose support (4) into the fan housing spacer.
3. It may be necessary to loosen the hose support clamps (7) to adjust their position to match the hooks of the hose support (4).
4. Connect the hose to the hose support by hooking the chain links (5) into the hose support hooks (6).



## 2.2 ATTACH DISCHARGE TUBE

1. Loosely assemble spacers (3) and one clamp (2) to the discharge tube (5) using two knobs (4) and carriage bolts (1).
2. Slide discharge assembly onto main assembly flange and tighten knobs (4).
3. Install second clamp (2) using two knobs (4) and carriage bolts (1).
4. To direct the discharge tube (5), loosen all four knobs (4), reposition, and then retighten the knobs.



## 2.3 ADD OIL TO ENGINE

Check the oil level and, if needed, fill the engine crankcase with the type and amount of oil specified in the engine owner's manual.

## 2.4 FILL THE FUEL TANK



### WARNING



Gasoline and diesel fuels are highly flammable and their vapors are explosive. To prevent personal injury or property damage:

Store fuel only in approved containers, in well ventilated, unoccupied buildings, away from sparks or flames. A container with a capacity of 2 gallons or less with a pouring spout is recommended. Do

not fill the fuel tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use fuel as a cleaning agent. **DO NOT MIX OIL WITH FUEL.**

Use only those types of fuels that are recommended in your engine owner's manual.

To add fuel:

1. Stop engine, wait for all parts to stop moving and disconnect spark plug wire. Remove key from key switch. Allow the engine and muffler to cool for at least three minutes.
2. Clean area around fuel fill cap and remove cap.
3. Using a clean funnel, fill fuel tank to 1/2" below bottom of filler neck to provide space for any fuel expansion. Install fuel fill cap securely and wipe up any spilled gasoline.

# 3 FEATURES & CONTROLS

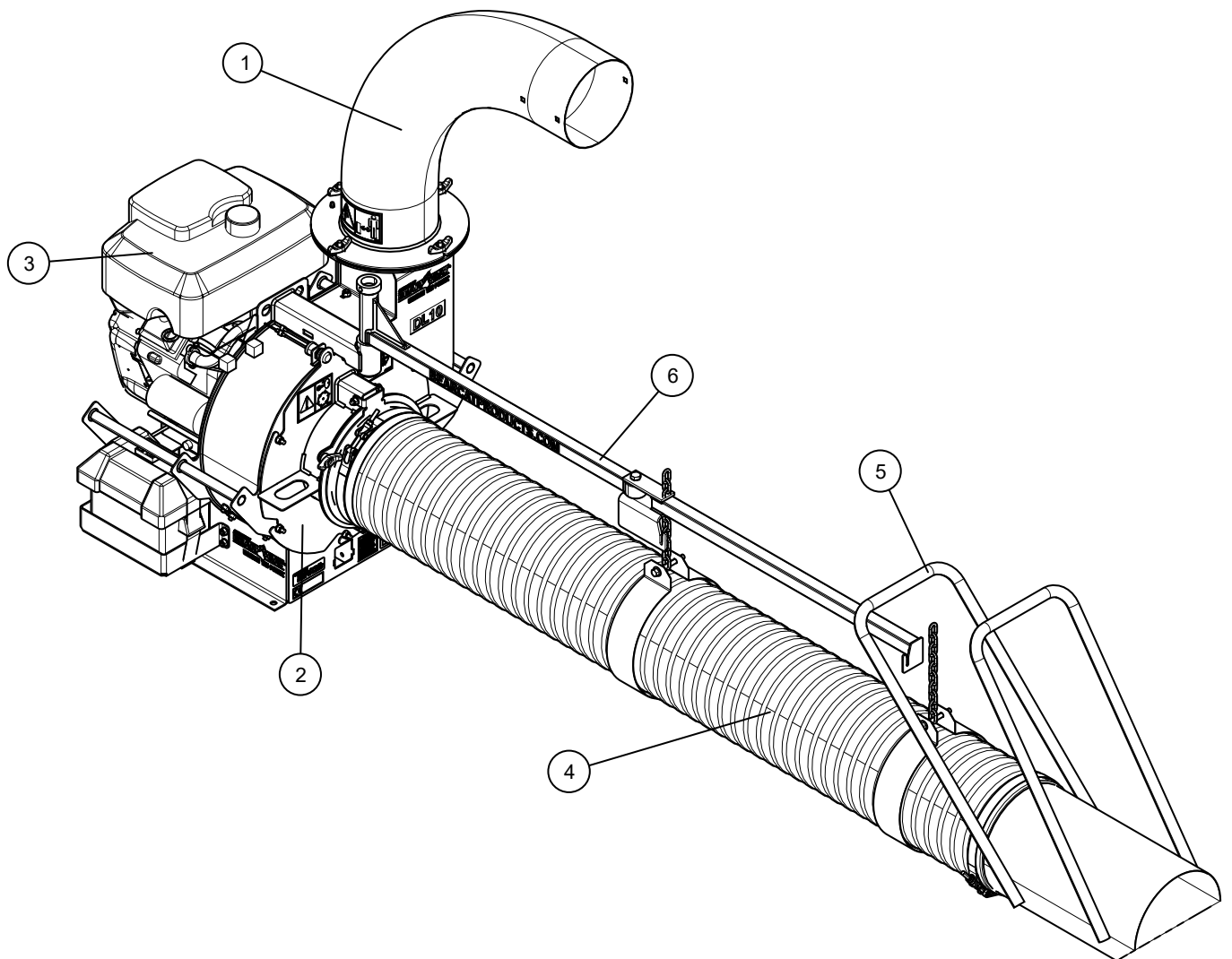
## Section

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Understanding how your machine works will help you achieve the best results when using your vacuum shredder. The following descriptions define the features and controls of your machine.

**REFER TO ENGINE OWNER'S MANUAL FOR FURTHER ENGINE OPERATING INSTRUCTIONS.**

- |                   |                 |
|-------------------|-----------------|
| 1. DISCHARGE TUBE | 4. HOSE         |
| 2. ACCESS COVER   | 5. HOSE HANDLE  |
| 3. FUEL TANK      | 6. HOSE SUPPORT |



# 4 OPERATION

## Section



### WARNING



Before operating your machine, be sure you read and understand all safety, controls and operating instructions in this owner's manual and on your machine. Failure to follow these instructions can result in serious injury or property damage.



### WARNING



Move machine to a clear, level area outdoors before starting. Do not operate in the vicinity of bystanders. Make sure cutting chamber is empty before starting.

#### 4.1 ATTACHING

1. Attach to trailer/platform using holes in vacuum shredder base.
2. A receiver bar kit is available for mounting to a vehicle's receiver hitch. See instructions included with kit for attaching.

#### 4.2 STARTING RECOIL MODELS



### DANGER



**BE PREPARED.** The hose inlet starts to vacuum debris as soon as the engine starts.

1. Check engine oil level before starting. Add oil if low, but do not overfill.
2. Make sure the hose inlet is free from debris.
3. Point the discharge tube in the correct direction.
4. Turn the fuel cut-off switch to ON.
5. Turn the engine switch to the ON position.
6. Move choke to the ON position. (If restarting a warm engine, partial or no choke may be necessary.)
7. Move the throttle to between half and full throttle.
8. Pull the recoil starter until light resistance is felt. Then, pull briskly. Make sure the starting cord retracts. Repeat until engine starts.
9. Move the choke to the RUN position.

10. Gradually move the choke lever to the OFF position as the engine warms.

11. Gradually move the throttle to the full throttle position.

#### 4.3 STOPPING THE MACHINE

1. Gradually move throttle to the slowest position.
2. Turn the engine switch to OFF.
3. If applicable, turn the fuel cut-off switch to OFF.

#### 4.4 VACUUMING OPERATION

1. Run engine at full operating speed before starting to vacuum.
2. Point the hose inlet towards the debris to be removed. Use a sweeping motion to remove debris from a large area.

#### 4.5 VACUUMING SAFETY & TIPS

1. Keep hands or any other part of body or clothing away from the hose inlet, discharge chute, or any moving part.
2. Maintain proper balance and footing at all times.
3. Be careful when vacuuming around gravel, gardens, lawn ornaments, etc.
4. Keep hose as straight as possible during operation in order to prevent plugging.
5. Use a sweeping motion when vacuuming debris.
6. For maximum suction, keep nozzle close to debris, but do not block air flow into the nozzle.
7. To extend hose life, periodically rotate the hose on the fan housing and intake nozzle. This will promote even wear on the hose.

#### 4.6 TRANSPORTING

1. Turn off the machine and wait for all moving parts to stop.
2. Remove the hose assembly by unscrewing the two knobs that hold it to the fan housing. Store the hose inside the towing vehicle so it will not drag on the ground.
3. Obey road signs and limits.

# 5 SERVICE & MAINTENANCE

## Section

### 5.1 MAINTENANCE SCHEDULE

The items listed in this service and maintenance schedule are to be checked, and if necessary, corrective action taken. This schedule is designed for units operating under normal conditions. If the unit is operating in adverse or severe conditions, it may be necessary for the items to be checked and serviced more frequently.

**SEE ENGINE OWNER'S MANUAL FOR FURTHER ENGINE MAINTENANCE AND TROUBLESHOOTING INFORMATION.**



## WARNING



To prevent personal injury or property damage: shut off engine and make sure that all moving parts have come to a complete stop before, servicing, adjusting or repairing. Disconnect the battery and remove ignition key where applicable.

SERVICE AND MAINTENANCE SCHEDULE					
		FREQUENCY			
COMPONENT	MAINTENANCE REQUIRED	REFER TO ENGINE OPERATOR'S MANUAL	BEFORE EACH USE	EVERY 8 HOURS	EVERY 50 HOURS
Engine oil	Change (1)	•			
Fuel filter	Replace	•			
Spark plug	Check condition and gap	•			
Air filter element	Clean (2) or replace	•			
Engine oil	Check/fill		•		
All internal and external nuts and bolts	Check tightness		•		
Air filter element	Check		•		
Spark arrestor*	Clean			•	
Entire machine	Clean				•
(1) First hours of use.					
(2) Perform more frequently when chipping dry or dirty wood.					
*If equipped					

### 5.2 CHANGE OIL

Check the oil level before each use. If needed, fill the engine with the type and amount of oil specified in the engine owner's manual. Do not overfill.

### 5.3 REPLACING THE HOSE

Check the condition of the hose frequently. Replace if it is split or damaged.

1. Shut off engine and allow fan to completely stop.
2. Remove spark plug wire.
3. Remove the clamp attaching the hose to the hose intake weldment. Remove the hose from the intake weldment.
4. Remove two bolts from the hose wraps to separate the hose from the hose support.
5. Remove the remaining clamp securing the hose to the hose handle. Remove the hose from the hose handle.
6. Replace hose by performing steps 1-5 in reverse order.



**WARNING**

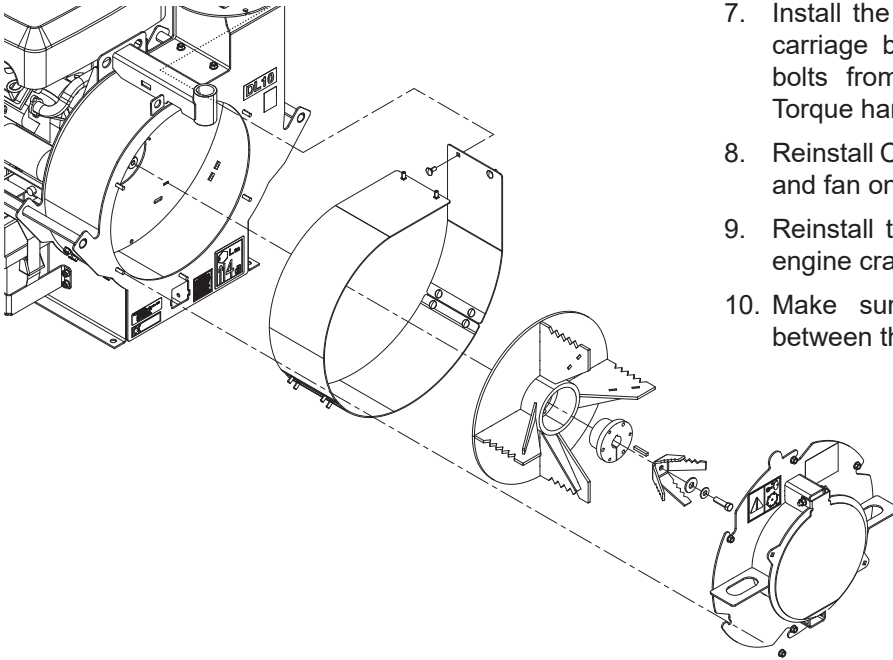


BEFORE INSPECTING OR SERVICING ANY PART OF THIS MACHINE, SHUT OFF POWER SOURCE, AND MAKE SURE ALL MOVING PARTS HAVE COME TO A COMPLETE STOP.

**5.4 REPLACING THE WEAR LINER**

The fan housing wear liners are replaceable. To replace the wear liners:

1. Shut off engine and allow fan to completely stop.
2. Remove the fan intake weldment from the fan housing.
3. Remove the 7/16" × 1-1/2" bolt and washer from the end of the engine crank shaft.



4. Remove Cat Claws™ (SN: J03492 and above), bushing and fan from the engine crank shaft.
5. From the outside of the vacuum shredder housing, remove twelve 5/16" nylock nuts that hold the three wear liners.
6. Remove the old wear liners and insert the new liners.
7. Install the new wear liners with twelve 5/16" × 3/4" carriage bolts and nylock nuts. Feed the carriage bolts from inside the vacuum shredder housing. Torque hardware to 17 ft-lbs.
8. Reinstall Cat Claws (SN: J03492 and above), bushing and fan on the engine crank shaft.
9. Reinstall the 7/16" × 1-1/2" bolt and washer to the engine crank shaft. Torque to 50 ft-lbs.
10. Make sure approximately 1/4" clearance exists between the fan housing and the fan plate.

**5.5 CLEARING A PLUGGED FAN**

The vacuum shredder is designed to be used in fairly dry conditions. Wet material, along with too much debris and large sticks, can plug the fan or hose. A plugged fan bogs down the engine and can possibly stop the engine if the fan is severely plugged. To clear the fan:

1. Shut off engine and allow fan to completely stop.
2. Remove spark plug wire.
3. Loosen the six 5/16" nuts that hold the intake weldment to the vacuum shredder frame.

4. Turn the vacuum intake counterclockwise to remove it.
5. Check the hose for clogs and clear debris from the fan.
6. Turn the fan by hand to verify it is unplugged.
7. Place the intake weldment over the six frame nuts and turn it clockwise to set the studs in the weldment notches. Tighten 5/16" nuts to 17 ft-lbs.
8. Reconnect spark plug wire and resume operation.

**5.6 CLEARING THE INLET HOSE**

1. If the hose becomes plugged during operation, straightening the hose may dislodge the clog.
2. If straightening the hose does not work, shake the hose in an up and down or side to side motion.

3. If the clog remains after performing the above two steps, shut the engine off and wait for all moving parts to stop moving. Then, remove the hose from the fan housing and manually unplug the hose.

**⚠ WARNING ⚠**

BEFORE INSPECTING OR SERVICING ANY PART OF THIS MACHINE, SHUT OFF POWER SOURCE, AND MAKE SURE ALL MOVING PARTS HAVE COME TO A COMPLETE STOP.

ENGLISH

**5.7 LUBRICATION**

**⚠ WARNING ⚠**

Polyurea and lithium-based greases are not compatible. Mixing the two grease types may lead to premature failure.

**NOTE**

Do not over grease bearings. Overfilling can lead to excessive heat and/or unseating of the seals. Add grease slowly and under light pressure. Whenever possible, rotate bearing slowly while lubricating.

Lubricate the machine periodically with a lithium-based grease. Extreme working conditions will require more frequent greasing. (See figure 5.2)

Grease Interval			
	8 Hours	50 Hours	100 Hours
Number of Zerks			1 Discharge Tube (A)

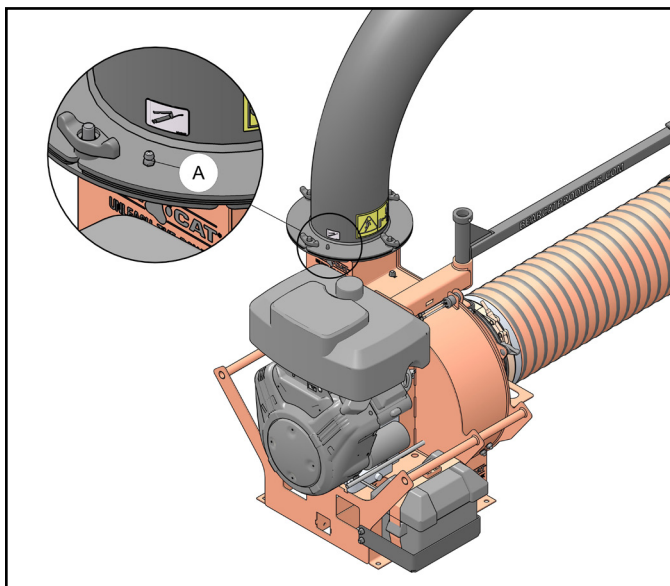


Figure 5.2, Grease Zerk

Visit <https://qrco.de/CBCGreaseZerks> to learn how to properly locate grease points and grease your Crary Bear Cat machine for maintenance.



# 6 TROUBLESHOOTING

## Section

Before performing any of the corrections in this troubleshooting chart, refer to the appropriate information contained in this manual for the correct safety precautions and operating or maintenance procedures. Contact your dealer or Crary Bear Cat® for service problems with the machine.

PROBLEM	POSSIBLE CAUSES	REMEDY
Engine will not start	Lack of fuel or oil	Fill fuel tank and check oil level
	Spark plug disconnected	Connect spark plug
	Kill switch on access cover is damaged	Test kill switch. Replace if it is not working.
	Dirty, stale, or contaminated fuel	Drain and refill fuel tank with fresh, clean unleaded regular gasoline or diesel. Replace fuel filter.
	Internal engine problems	See your engine dealer
Engine or fan stalls or stops	Plugged fan	Clear fan
	Vacuuming material too quickly	Slow vacuuming rate
Engine overheats	Cooling system plugged	Clean cooling fan and cooling fins on the radiator or engine block
	Improper coolant level	Fill engine to correct coolant level. Refer to the engine owner's manual.
Engine runs, but dies or does not accelerate properly	Air filter dirty	Clean or replace
	Fuel filter dirty	Replace
	Fuel vent plugged	Clean or replace
	Spark plug dirty/worn	Clean and adjust or replace
	Carburetor vibration	Adjust
	Cooling system dirty/plugged	Clean
	Spark arrestor* plugged	Clean or replace
Fan will not turn	Plugged fan	Clear fan
Plugged discharge tube	Engine speed too slow	Increase engine speed
	Vacuuming too much material into machine	Slow vacuuming rate
Engine speeds up; will not vacuum material	Inlet hose is plugged	Shake hose in an up and down or side to side motion in order to dislodge debris

\*If equipped

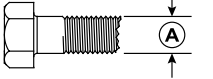



# 7 SPECIFICATIONS

## Section

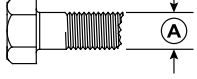




DESCRIPTION	ENGLISH	METRIC
Engine	Briggs & Stratton® Vanguard® 570cc	
Hose size	10" diameter × 12.5'	25.4 cm diameter × 3.8 m
Fan size	16.25" × 6.13"	41.3 cm × 15.6 cm
Discharge size	8" diameter	20.3 cm diameter
Discharge rotation	360 degrees	
Maximum CFM (cubic ft./min)	3900	
Drive type	Shaft	
Starter	Electric	
Mounting type	Receiver hitch	
Weight	340 lbs.	154 kg
Machine Dimensions (L × W × H)	42" × 30" × 57"	107 cm × 76 cm × 145 cm

**7.1 BOLT TORQUE**

The tables below are for reference purposes only and their use by anyone is entirely voluntary, unless otherwise noted. Reliance on their content for any purpose is at the sole risk of that person and any loss or damage resulting from the use of this information is the responsibility of that person.

SAE Grade and Head Markings	SAE 2	SAE 5	SAE 8	Bolt Diameter 
				

BOLT DIAMETER (A)	BOLT TORQUE*					
	SAE 2		SAE 5		SAE 8	
	NM	FT-LB.	NM	FT-LB.	NM	FT-LB.
1/4"	7.5	5.5	11	8	16	12
5/16"	15	11	23	17	34	25
3/8"	27	20	41	30	61	45
7/16"	41	30	68	50	95	70
1/2"	68	50	102	75	149	110
9/16"	97	70	149	110	203	150
5/8"	122	90	203	150	312	230
3/4"	217	160	353	260	515	380
7/8"	230	170	542	400	814	600
1"	298	220	786	580	1220	900
1-1/8"	407	300	1085	800	1736	1280
1-1/4"	570	420	2631	1940	2468	1820

Metric Grade and Head Markings	4.8	8.8	10.9	12.9	Bolt Diameter 
					

BOLT DIAMETER (A)	BOLT TORQUE*							
	4.8		8.8		10.9		12.9	
	NM	FT-LB.	NM	FT-LB.	NM	FT-LB.	NM	FT-LB.
M3	0.5	0.4	–	–	–	–	–	–
M4	3	2.2	–	–	–	–	–	–
M5	5	4	–	–	–	–	–	–
M6	6	4.5	11	8.5	17	12	19	14.5
M8	15	11	28	20	40	30	47	35
M10	29	21	55	40	80	60	95	70
M12	50	37	95	70	140	105	165	120
M14	80	60	150	110	225	165	260	190
M16	125	92	240	175	350	255	400	300
M18	175	125	330	250	475	350	560	410
M20	240	180	475	350	675	500	800	580
M22	330	250	650	475	925	675	1075	800
M24	425	310	825	600	1150	850	1350	1000
M27	625	450	1200	875	1700	1250	2000	1500

\*Torque value for bolts and capscrews are identified by their head markings.

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

# 8 PARTS & OPTIONS

## Section

### 8.1 REPLACEMENT PARTS

#### FOR MACHINE SERVICE OR PARTS

For service assistance, contact your nearest authorized Cray Bear Cat dealer or the factory. For parts, contact your authorized dealer. The parts manual for your machine is available at [bearcatproducts.com/Product-Support/Find-A-Product-Manual](http://bearcatproducts.com/Product-Support/Find-A-Product-Manual). Your dealer will need to know the serial number of your machine to provide the most efficient service. See below for information on how to identify and record the serial number for your machine.

#### FOR ENGINE SERVICE OR PARTS

For engine service or parts, contact your nearest authorized engine dealer. Cray Bear Cat does not handle any parts, repairs or warranties for engines.

#### ORDERING PARTS

Only genuine Cray Bear Cat replacement parts should be used to repair the machine. Replacement parts manufactured by others could present safety hazards, even though they may fit on this machine. Replacement parts are available from your Cray Bear Cat dealer.

Provide the following when ordering parts:

- The SERIAL NUMBER of your machine.
- The PART NUMBER of the part.
- The PART DESCRIPTION.
- The QUANTITY needed.



4' Flexible Horizontal Chute Extension, 74737-00



16" Vertical Chute Extension, 75888-00

### 8.2 OPTIONS

PART NUMBER	DESCRIPTION
74737-00	KIT, HOSE AND CLAMP
75888-00	KIT, CHUTE EXTENSION
77105-00	KIT, VACUUM SHREDDER LIGHTS
77398-00	KIT, LINER WEAR
77450-00	KIT, DEFLECTOR
77464-00	KIT, RECEIVER MOUNT



Lights Kit, 77105-00



Crary® Bear Cat® • 237 12th St. NW, West Fargo, ND 58078

For customer service or for your nearest Crary Bear Cat dealer call 888.625.4520 | For International call 701.282.5520

[BEARCATPRODUCTS.COM](http://BEARCATPRODUCTS.COM)

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