OWNER'S MANUAL

# EXCAVATOR
# BRUSH CUTTER



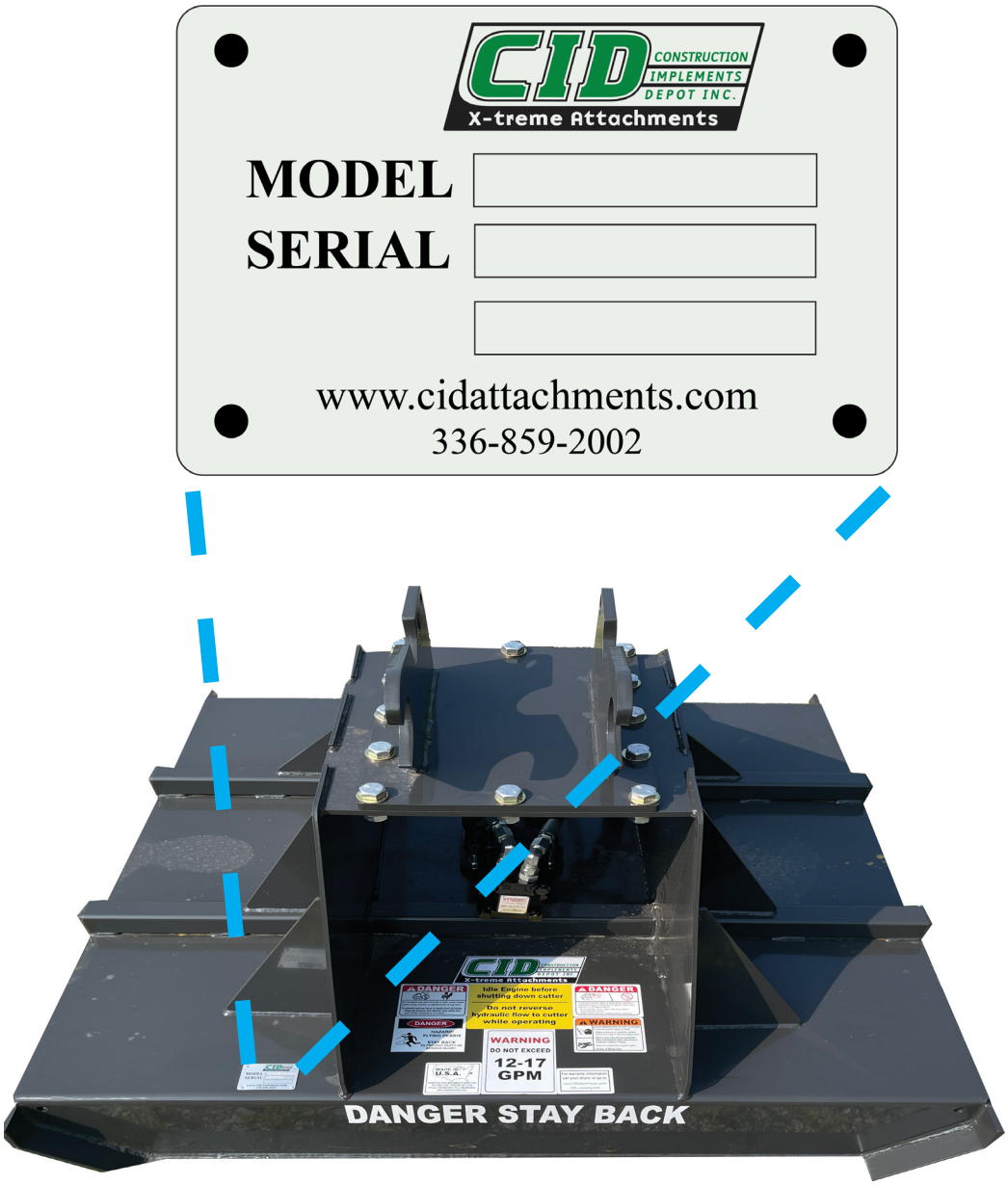
## MODEL SERIES

| STANDARD DUTY | XTREME DUTY | SEVERE DUTY |
|---|---|---|
| 12-17 GPM | 14-20 GPM | 17-35 GPM |
| SDEXBC91542 | EXBC142044 | SVEXCBCL |
| 12-29 GPM | 20-26 GPM | 35+ GPM |
| SDEXBCSTAR44 | EXBC202644 | SVEXCBCH |
| 17-24 GPM | 24-30 GPM | |
| SDEXBC142042 | EXBC243044 | |
| | 12-29 GPM | |
| | EXBCSTAR44 | |

SAFETY RULES | OPERATING INSTRUCTIONS | MAINTENANCE PROCEDURES

EXBCMAN01
OCTOBER 2021

**Record product information below.**




| |
|---|
| **PURCHASE DATE:** |
| **DEALER NAME:** |
| **ADDRESS:** |
| |
| **PHONE NUMBER:** |

## MODEL COMPARISON

**X-TREME DUTY**

- Designed for excavators with operating weights of 12,000 lbs or more.
- Cuts trees up to 3” in diameter.
- Optional debris chains.
- Optional Star Motor ( no case drain required)

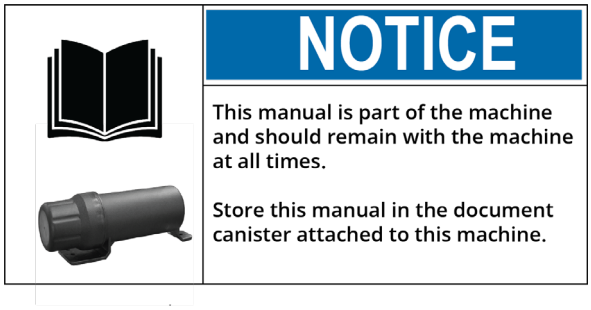
**STANDARD DUTY**

- Designed for mini-excavators with operating weights under 12,000 lbs.
- Cuts trees and saplings up to 2” in diameter.
- 2 Blades
- Optional Star Motor (no case drain required).

**SEVERE DUTY**

- 12,000 - 18,000lb excavator operating weight classs.
- Cuts trees up to 6” in diameter.
- 3 blades / 9x mulching teeth.
- Case drain required.

Register this product at **www.cidattachments.com**.







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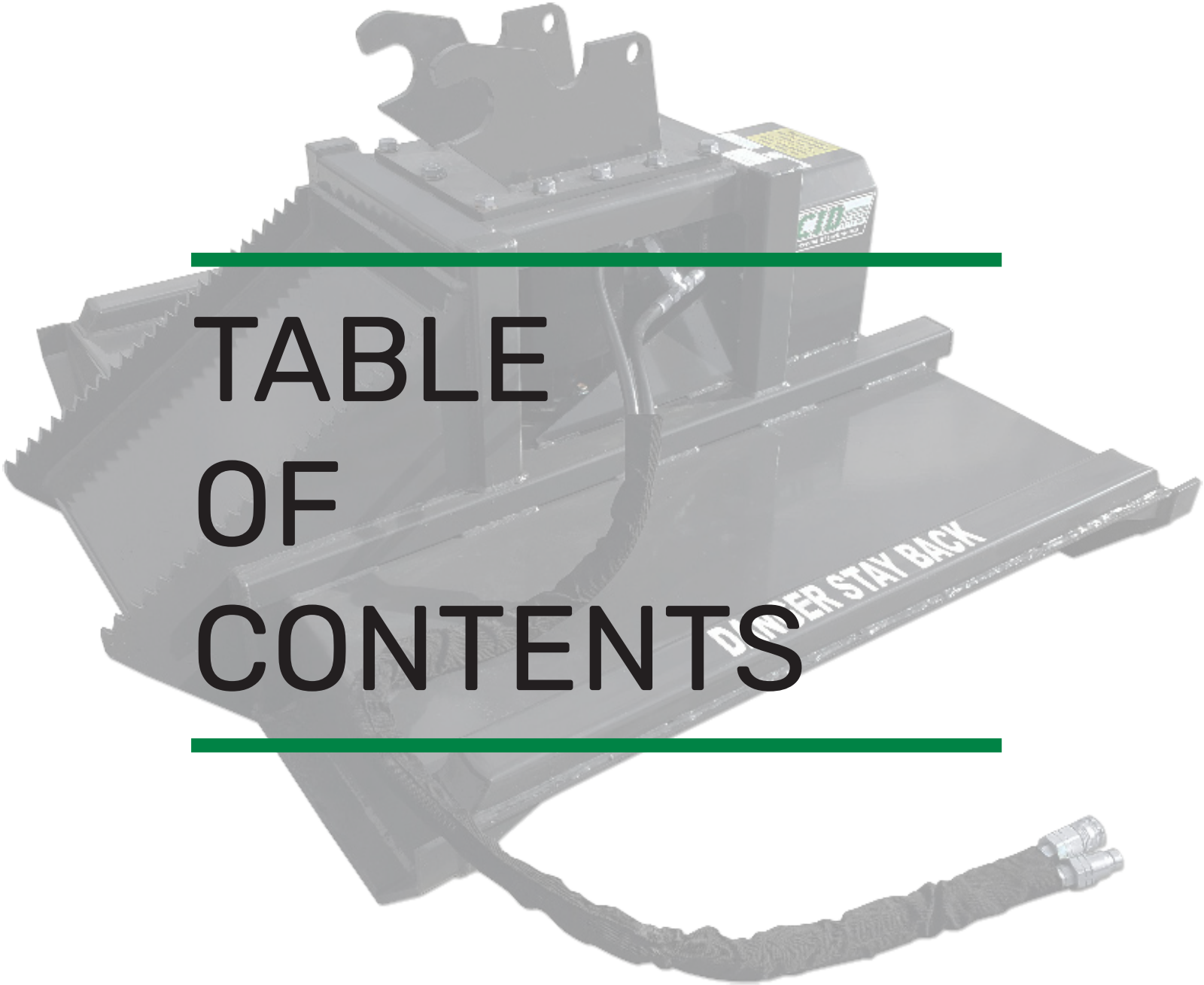

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# THANK YOU

Dear Owner:

We appreciate your business and thank you for choosing Construction Implements Depot, Inc. as your provider of quality skid steer attachments. We are committed to providing you with a heavy duty product that will provide years of satisfaction and safe operation.

This manual will provide instructions on how to safely operate and maintain the CID Excavator Brush Cutter. All users must read and understand this manual before operating this machine. Upon reading this manual, all users should sign the "Safety Acknowledgement Form" at the end of this manual. Store this manual in the document canister attached to this machine. You may access an electronic version of this manual online by scanning the QRS code on page 1 of this manual.

Please record your model and dealer information on the inside front cover. You will be asked to provide this information when ordering parts or requesting service. If you need more information on this product, contact your local dealer or visit ***www.cidattachments.com***.

Sincerely,

The CID Team
Construction Implements Depot, Inc.

# SECTION 2

# SAFETY INFORMATION

## 2.1 Introduction

The following terms are used interchangeably throughout this manual.

| Term | Alternate Terms Used |
|---|---|
| Excavator Brush Cutter | **implement, attachment, product, machine, brush cutter, cutter** |
| Excavator | **mini excavator, mini ex, prime mover** |
| Operator | **user, personnel** |

The **Excavator Brush Cutter** is designed and manufactured with safety in mind. However, improper use and operator error can result in death or serious injury. It is important that you read and fully understand the safety instructions and operating procedures in this manual before operating this brush cutter. Accident prevention is a combination of good judgement, common sense, awareness and proper training!

BEFORE you operate this Brush Cutter:

1. KNOW how to safely operate your excavator.

2. READ and UNDERSTAND the safety instructions and operating procedures contained in this manual.

3. ACKNOWLEDGE your understanding of all safey instructions presented in this manual by signing the “Safety Acknowledgement Form” at the end of this manual.

Although every effort has been made to ensure a safe product, every possible circumstance that could pose a potential hazard cannot be anticipated. The safety warnings in this manual and on this product, are therefore not all-inclusive.

In addition to the safety messages presented in this section, you must also read and understand the safety messages presented in the other sections of this manual.

## 2.2 Safety Symbols

This manual and decals on this machine use safety symbols, pictograms and color coded signal words to alert you to potential hazards that may cause death or severe injury if a safety instruction is ignored. Become familiar with the following symbols.

**SAFETY ALERT SYMBOL** - This symbol is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### Hazard Classifications

Hazards are identified by the "Safety Alert Symbol" and followed by the signal word "DANGER", "WARNING", or "CAUTION".

**DANGER**

**Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.**

**WARNING**

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

**CAUTION**

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

**NOTICE**

**Indicates a situation which may cause damage to equipment or property. Messages are not related to personal injury.**

**Safety Instructions**

**Indicates specific safety-related instructions or procedures.**

## 2.2 Safety Symbols Cont.

### Safety Pictograms

Pictograms are graphic symbols meant to alert you of a potential hazard. Read and understand the hazard description for each of these symbols.

| Pictogram | Description |
|---|---|
|  | **PINCH HAZARD**: Keep clear of skid steer and brush cutter machine to prevent death or serious injury from pinching of moving parts. |
|  | **FLYING DEBRIS HAZARD**: ONLY operate this machine using an excavator that has a shatter proof cab to prevent death or serious injury from objects being thrown. |
|  | **OPERATING MANUAL**: Operators must read and understand the safety instructions in the operating manual to prevent death or serious injury. |
|  | **EYE PROTECTION & CARDBOARD**: Operators and Maintenance personnel must wear proper eye protection and use cardboard or wood to investigate hydraulic leaks to prevent death or serious injury from being injected with high pressure hydraulic fluid. |
|  | **HIGH PRESSURE FLUID INJECTION HAZARD**: Operators and Maintenance personnel must not place fingers or hands directly over a hydraulic leak to prevent death or serious injury from being injected with high pressure hydraulic fluid. |
|  | **NO BYSTANDERS**: DO NOT operate this machine near bystanders. Bystanders must stay back at least 300 feet from the machine to prevent death or injury from objects being thrown. |
|  | **CRUSH HAZARD**: DO NOT place any part of the body under the machine or excavator arms to prevent death or serious injury from being crushed . |

The safety decals affixed to this machine are in place to keep you safe. DO NOT ignore these decals. Read and understand each decal's safety message. The following safety decals are affixed to this machine:

1


2


3


4

## Figure 2.3 Safety Decal Locations

## Figure 2.3 Safety Decal Locations Cont.

| REF | DESCRIPTION | QTY |
|---|---|---|
| 1 | SCAN TO VIEW OWNER'S MANUAL QRS CODE STICKER | 1 |
| 2 | COMBO DANGER WARNING LABEL PINCH HAZARD, HIGH PRESSURE FLUID HAZARD, FLYING DEBRIS HAZARD **** REPLACES OLDER 4 STICKER LABELS** | 1 |
| 3 | WARNING DO NOT EXCEED GPM LABEL ****WHEN ORDERING CHOOSE THE PROPER DECAL FOR YOUR MODEL** | 1 |
| 4 | DANGER STAY BACK LABEL | 1 |

### Safety Instructions

- Decals must be kept clean and legible at all times.
- Operators must inspect the machine for safety decals.
- Replace missing, worn or damaged decals immediately.
- Use care when cleaning the machine. When using a hot pressure washer make sure water jet is not too close to the decal as this may cause the decal to peel.
- When replacing parts, be sure safety decals are in place prior to using the machine.
- Make sure metal surface is dry and free of dirt and grease before applying a new decal to this machine.
- Contact your local dealer to order replacement decals.

## 2.4 Excavator Requirements

**⚠ CAUTION**

**Ensure your excavator is in good operating**

**Minimum Requirements**

**Impact Resistant Thermoplastic Polycarbonate Cab Enclosure.**

**Aux Hydraulic Flow That Matches GPM Range of Brush Cutter.**

## 2.5 General Safety Instructions

Below are general safety instructions that relate to the overall operation and maintenance of this machine. It is important that you read and understand each message to prevent serious injury or death.

- ALWAYS watch for overhead power lines.
- DO NOT place hands or feet under mower deck while blades are spinning.
- NEVER operate this brush cutter when bystanders are within 300 feet of your work area. Flying debris could cause serious injury or death.
- NEVER position your body or limbs under an unsupported cutter deck.
- DO NOT allow this machine to contact buildings, utilities, large rocks or tree stumps or you may loose control of the skid steer loader.
- NEVER use drugs or alcoholic beverages while operating or servicing this machine.
- ALWAYS operate this attachment during daylight or well-lit areas.
- Install this brush cutter on an excavator equipped with a thermoplastic polycarbonate door panel and side panels only.
- To prevent the excavator and implement from rolling forward, lower the dipper and cutter to the ground, stop the engine and set the parking brake when exiting the excavator cab.
- Inspect implement for missing hardware prior to using this machine.
- DO NOT allow children to play on or around this equipment at any time. Store this implement in an area not frequented by children.
- ALWAYS wear the proper personal protection equipment while operating or servicing this machine. NEVER operate or service this machine with bare feet, sandals, or other light footwear.
- ALWAYS wear work gloves when handling cutter blades as they are very sharp.
- ALWAYS use eye protection while operating or servicing this machine.
- DO NOT speed! Keep your driving speed between 2 and 5 mph.

# SECTION 3

# OPERATING PROCEDURES

## 3.1 Unpacking Your Brush Cutter

Your attachment arrives from the factory strapped to a wood pallet, and requires no final assembly. Use a pair of tin snips to remove the steel strapping.

**⚠ CAUTION**

Shipping straps are under great tension, and could lash out uncontrollably when cut causing injuries to your body. Keep bystanders away and wear safety glasses and gloves while removing the straps.

| Pre-Operating Checklist | |
|---|---|
| ✔ | Task |
| ☐ | Brush cutter attachment is securely attached to the excavator. |
| ☐ | Hydraulic hoses are connected and locked to the excavator hydraulic couplers with no signs of hydraulic oil leaks present. |
| ☐ | Blades are in working condition and securely attached to the blade holder and all bolts and nuts are tight. |
| ☐ | Safety labels are present and legible. |
| ☐ | No material, ropes, wire, etc. is obstructing the blades and blade holder assembly. |
| ☐ | The area of operation is clear of bystanders and any obstacles that could damage the equipment or cause injury to the operator. |
| ☐ | The operator is of good health and not under the influence of any mind altering substances or alcohol. |

## 3.2 Connecting Brush Cutter

Consult your excavator operator's manual for specific instructions on how to connect your brush cutter attachment to your excavator.

**WARNING**

**The locking pins must extend through the holes on the attachment and secured to prevent the attachment from falling causing serious injury or death.**

**With the brush cutter securely mounted to the excavator:**

Connect the hydraulic couplers from the brush cutter to the excavator's auxiliary hydraulic system.

**NOTICE**

**To keep contaminants from entering the hydraulic system; wipe off any dirt or dust from the male or female hydraulic flat face couplers with a clean rag before attaching hoses.**

**NOTICE**

**Check that the hydraulic hoses are locked into the excavator's couplers before starting the cutter.**

# 3.3 How To Start and Stop The Brush Cutter

## Brush Cutter Controls

Your brush cutter is designed to run off the excavator's auxiliary hydraulic system, and is activated and deactivated by a control in the operator's cab. The height and tilt functions of your brush cutter are operated with the control handles in the cab. Consult your excavator operator's manual for precise instructions regarding these functions.

## Hydraulic Flow Requirements

When operating the cutter, set the excavator throttle at a speed that will produce the required flow. Your excavator dealer can measure the flow available on your machine and recommend a throttle setting that is compatible with this attachment.

*Note: Hydraulic flow to the cutter may be reduced whenever the excavator is in motion or when swinging the boom or raising or lowering the dipper.*

## Starting the Cutter

**WARNING**

**Moving or engaging the cutter with bystanders in the area could result in Death or Serious Injury. Before engaging cutter hydraulics, always make sure the area is clear of bystanders.**

1. Ensure attachment is secure and lock pins are fully engaged.
2. Ensure hydraulic hoses are locked to the excavator's hydraulic couplers.
3. Raise the brush cutter slightly above ground level.
4. Set excavator engine RPM to slightly above idle.
5. Activate excavator auxiliary hydraulic circuit.
6. Once brush cutter is up to speed, increase excavator engine to full throttle. Ensure cutter is running smoothly.

## 3.3 How To Start and Stop The Brush Cutter Cont.

NOTICE

**If the brush cutter begins to vibrate while increasing the RPM's, deactivate the auxiliary hydraulic system and investigate the cause. Refer to the Troubleshooting Chart on page 35 of this manual.**

### Stopping the Cutter

1. Set excavator engine to idle.
2. Allow the cutter to slow down.
3. Shut off hydraulic flow to the brush cutter.
4. Lower the cutter to the ground.

NOTICE

**ALWAYS release the hydraulic system pressure from the auxiliary hydraulic circuit prior to removing the attachment or performing any hydraulic service work.**

## 3.4 First Time Use Procedure

Before operating the brush cutter at its maximum capacity, follow the first time use procedure below.

NOTICE

**Before operating the brush cutter, check the excavator's hydraulic oil level and add oil if necessary.**

**Ensure the case drain hose is properly attached to the prime mover's case drain connection. DO NOT operate this attachment WITHOUT the case drain hose attached. Excessive hydraulic pressure will blow out the seals.** ***(Models with the Star Motor do not require a case drain.)***

NOTICE

**Ensure that hydraulic hoses are securely locked to the excavator hydraulic couplers before starting the brush cutter.**

**After starting excavator, lift the attachment 6 inches off the ground surface:**

1. With the excavator engine RPM just above idle, activate the excavator's auxiliary hydraulic circuit.
2. Allow the cutter to run for 30 seconds to purge air from the system, then turn off hydraulic flow to the brush cutter and allow it to come to a complete stop.
3. Lower the brush cutter to the ground, set parking brake, shut off the excavator engine and exit the operator's compartment.
4. Check the excavator's hydraulic oil level, add oil if necessary.
5. Inspect the brush cutter hydraulic plumbing for leaks and repair as necessary.

WARNING

**A small stream of oil from a pinhole leak could penetrate your skin if contacted. To avoid an accident that could result in Death or Serious Injury, never use your hand or other body parts to locate a hydraulic leak.**

6. Restart the excavator, then set engine to slightly above idle.
7. Raise brush cutter off the ground and engage the auxiliary hydraulic switch.
8. Allow cutter to come up to speed before increasing engine speed.

# 3.5 Cutting Operations

## General Operating Tips

- SLOW down the excavator if the engine “bogs” down or if the cutter speed is too slow because of too much load.
- LISTEN and FEEL for any strange vibrations or noises. If you feel a bad vibration when cutting, slow the excavator down and see if the vibration stops. If not, stop the brush cutter and investigate the cause. Refer to the “Troubleshooting Chart” on page 36 of this manual.
- ALWAYS be aware of your surroundings and pay attention to what obstacles and terrain are in front of you.
- ALWAYS inspect work area before cutting. Locate any utilities, steel posts, rocks, overhead obstructions, or any other objects that could damage equipment or cause injury if struck.

**⚠ CAUTION**

**Cutting tree branches with the cutter in an elevated position could result in Death or Serious Injury if the excavator becomes unstable. Never raise the cutter more than a few feet off the ground when working on slopes or uneven terrain.**

**⚠ CAUTION**

**When cutting trees beware of the direction of fall to avoid the tree from crashing on to your excavator.**

**⚠ CAUTION**

**DO NOT operate the brush cutter if you (the operator) can see the cutter blade. If the operator can see the cutter blade, the back of the cutter is raised TOO HIGH. Lower the cutter deck to avoid being hit by flying debris.**

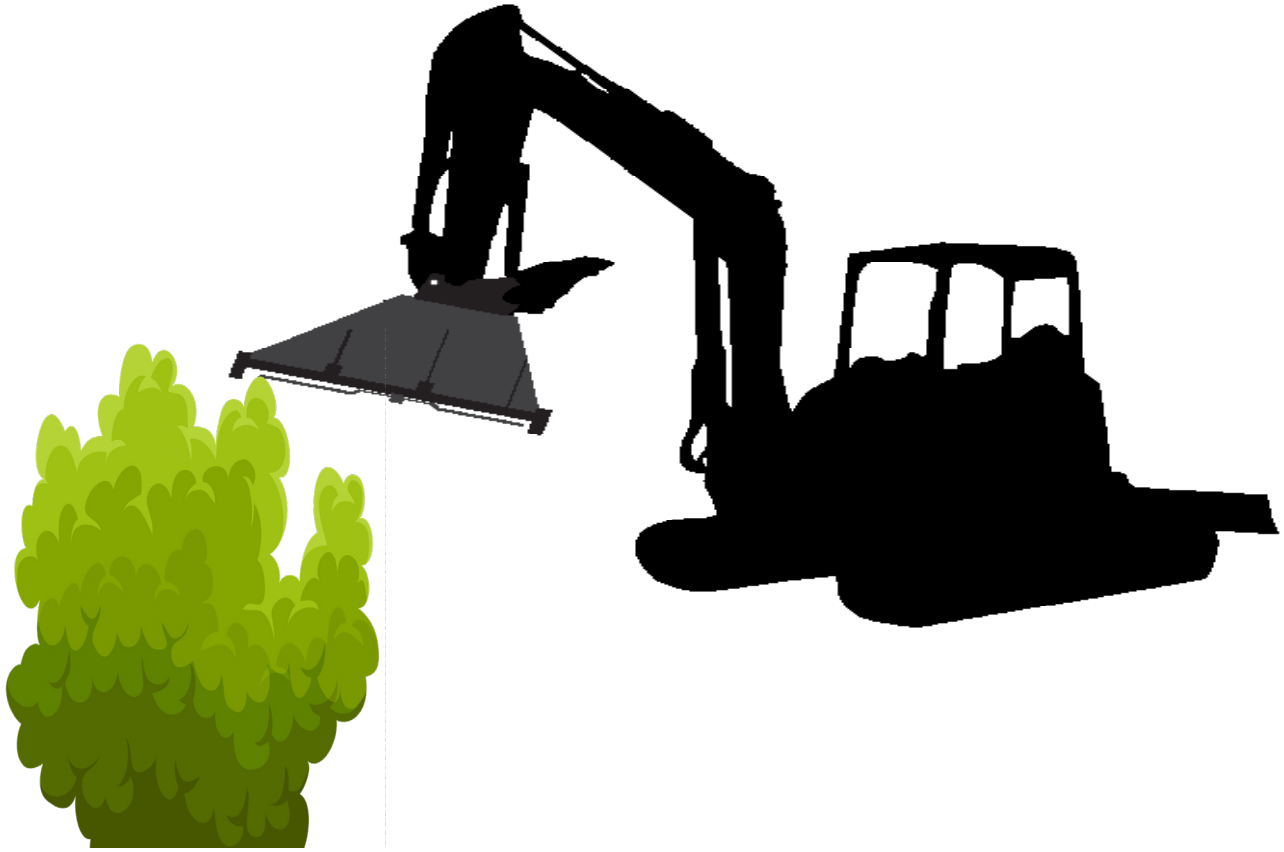
**⚠ CAUTION**

**NEVER use your brush cutter to push, pull, lift or move any type of object or vehicle. DO NOT use this brush cutter to “push” down trees without using the cutter blades.**

## Cutting Method

1. Position the brush cutter slightly above the vegetation to be cut.
2. Activate the auxiliary hydraulic circuit.
3. Increase the excavator engine rpm.
4. Lower the cutter onto the vegetation while swinging the boom. Adjust the boom height as necessary to compensate changes in terrain elevation.

Note: When cutting without swinging the boom, position the cutter so that material is being cut at the end of the blades.



# SECTION 4

# MAINTENANCE PROCEDURES

## 4.1 Maintenance Overview

The maintenance procedures described in this manual should only be carried out by qualified mechanics who have been trained to repair this machine.

Some procedures require special tools and skills to complete. DO NOT attempt to repair or perform service work on this machine unless you have the skills and tools to do so. Contact your local dealer for maintenance and repair services.

**NOTICE**

**Improper maintenance or modifications to the design or performance of this machine will void the warranty. ONLY use genuine CID replacement parts on this machine.**

### Safety Instructions

**Obey the following safety instructions when servicing or repairing this machine.**

- Wear proper Personal Protective Equipment (PPE) while working on this machine, which may include safety glasses, hard hats, steel toe boots, gloves, etc.
- Wear a welding helmet when welding to protect your eyes, face and neck from flash burn, ultra-violet radiation and heat.
- Ensure all jack stands, lifts and hoists are in good working condtion and have the rated load capacity to support the load.
- Only perform service work in a well-lit area.
- Allow the machine to cool down before servicing this machine. Hot oils can burn your skin.
- NEVER work under an unsupported cutter deck.

## 4.2 Maintenance Schedule

This brush cutter attachment will provide years of dependable service if routine maintenance procedures are performed. The maintenance tasks listed below are based on normal operating conditions. More frequent maintenance may be necessary with intense use or when operating in adverse environmental conditions.

| MAINTENANCE TASK | BEFORE EACH USE | WEEKLY | YEARLY |
|---|---|---|---|
| Check excavator hydraulic fluid level. Add fluid as necessary. | X | | |
| Check that all fasteners (nuts, bolts,, washers, pins, keepers) are in place. Tighten as necessary. (See Bolt Torque Table on page 34) | X | | |
| Inspect and replace any worn, torn, or missing safety decals. | X | | |
| Inspect hydraulic plumbing (hoses and connectors) for damage or leakage. Repair or replace hydraulic items as necessary. | X | | |
| Check condition of cutter blades. Sharpen or replace as necessary. | X | X | X |
| Check oil level in bearing housing. Add fluid as necessary. | | X | |
| Change oil in bearing housing. *** Change oil after 50 hours of first time use, then every 1000 hrs or yearly.** | | | X |
| Wash Brush Cutter | | X | |
| Check brush cutter for major scratches and dings. Sand and repaint these areas to prevent rust damage. ***Use a paint formulated for farm equipment which can be found at your local hardware store**. | | | X |

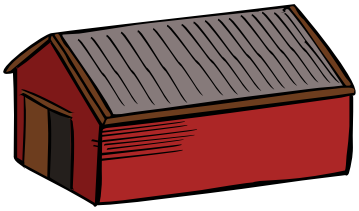
## Maintenance Log

Document all maintenance and service activities performed on this brush cutter using the maintenance log included at the end of this manual.

## Storage Tips

To get years of quality use out of your brush cutter, follow these tips when storing your brush cutter:

Ensure brush cutter is free of debris, dirt, grime and grease.



Store your brush cutter in a dry shed or garage.

When storing your brush cutter for the season, cover with a weather proof tarp to protect it from the elements.

# 4.4 Blade Holder Removal

**⚠WARNING**

**To avoid an accident that could result in death or serious injury, NEVER place your body under an unsupported cutter deck when servicing this brush cutter.**

**ONLY service the brush cutter on stable, even terrain. NEVER park on sloped terrain to avoid being struck and killed or seriously injured by the unexpected rolling or movement of the excavator.**

**NOTICE**

**ALWAYS release the hydraulic system pressure from the auxiliary hydraulic circuit prior to removing the blade holder.**

# 4.4 Blade Holder Removal Cont.

## Removal Procedure

**⚠ CAUTION**

**When performing this procedure alone, rig a pair of choker slings through the blade holder and connect to an overhead hoist. This will prevent the blade holder from falling on to you causing injury to your body. Ensure attachment is secure and stable before removing the blade holder.**

1. Place the excavator attachment below an overhead hoist/crane or use forklift to raise into position.
2. Position the cutter deck to gain access to the blade holder assembly (see figure 4.4a below).
3. If excavator brush cutter is attached to excavator, raise the dipper into position, stop the hydraulic flow circuit, turn off excavator engine, set parking brake, and install dipper arm locks.
4. Rig a pair of choker slings through the blade holder and connect to an overhead hoist. Keep tension on the slings to prevent the blade holder from falling once the bolts are removed.
5. Remove the **six 3/4 inch bolts** that secure the holder to the gearbox shaft. If the blade holder fails to seperate, use a wedge breaker tool to help seperate the blade holder from the gearbox flange.

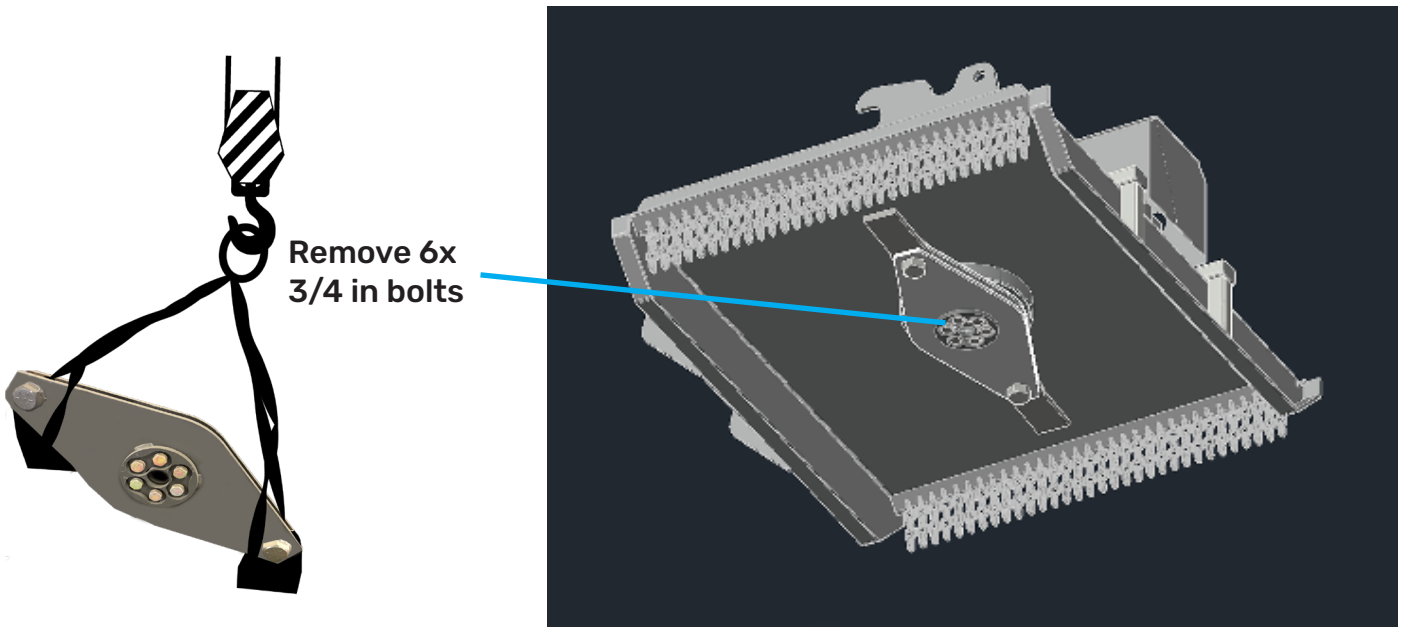



**Figure 4.4a Blade Holder and Sling System**

## 4.5 Blade Holder Installation

### Installation Procedure

**NOTICE**

**Use a hoist, lift table or forklift to support the blade holder during installation.**

1. Align the hole in the blade holder to the gearbox shaft and fully seat the holder onto the shaft.
2. Tap the blade holder with a rubber hammer to ensure full engagement. The blade holder must be properly aligned and seated on the gearbox shaft splines before proceeding to the next step.
3. Install the six 3/4 inch cap screws and torque to the value shown in the Torque Table on page 34.

## 4.6 Blade Removal

**⚠ CAUTION**

**Cutter blades are sharp and could cut you if mishandled. ALWAYS wear protective gloves and footwear when handling cutter blades.**

**NOTICE**

**This procedure requires special tools and skills. DO NOT attempt to remove or sharpen blades if you do not have the tools or skills. Take your brush cutter to your local dealer for blade services.**

### Blade Removal Procedure

1. Remove the blade holder as described in Section 4.4 of this manual.
2. Carefully cut the welded bead around the bolt head to allow the bolt to rotate. DO NOT cut into the blade holder (see **Figure 4.6a** on next page).
3. Drive the bolt shank from the blade and blade holder, being careful not to let the blade fall onto your feet (repeat steps 2 and 3 for each bolt).

## 4.6 Blade Removal Cont.

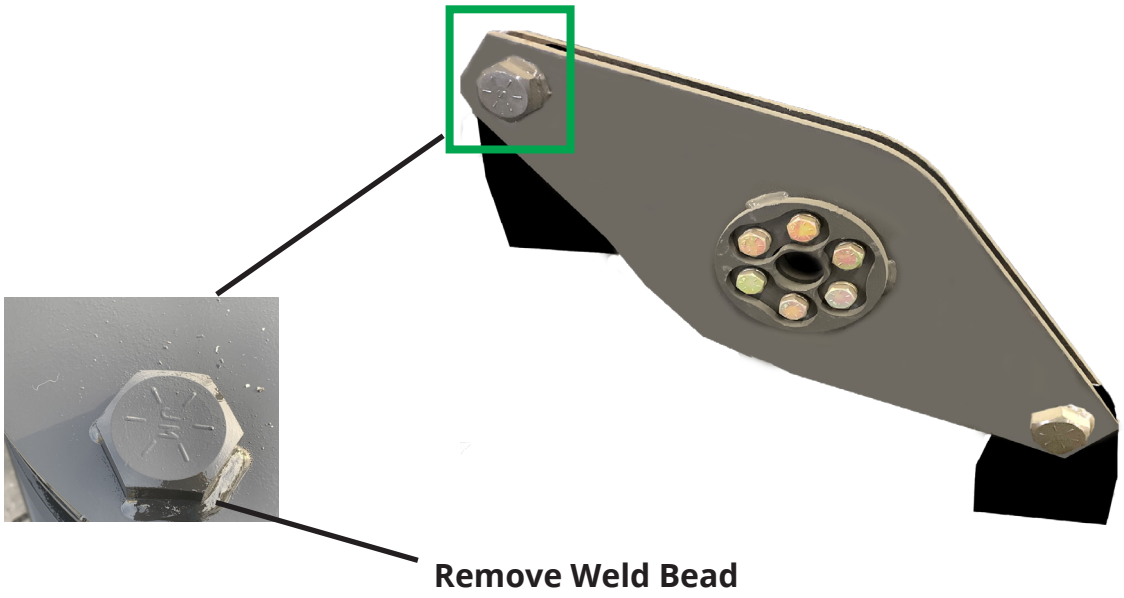



**Figure 4.6a - Blade Holder Bolt Weld Bead Removal**

### Blade Sharpening Notes

1. Sharpen cutter blades with the appropriate tool.
2. Be careful not to overheat the blade steel causing the blade material to become brittle and prone to early failure.
3. Grind each blade to the similar shape and size so as to not create a set of mismatched blades.
4. ALWAYS sharpen or replace cutter blades as set.
5. NEVER mix and match used blades with new blades as they will cause the brush cutter to be unbalanced and result in a vibration that may cause damage to other

## Blade Installation Procedure

NOTICE

**Disconnect the negative ground cable from your excavator's battery when performing this procedure with the brush cutter attached to the excavator.**

1. Grind away the old weld bead to ensure a flat smooth surface for new bolt head to mate to.
2. Place nut in the recessed hole on top of blade holder.
3. Insert new blade bolt up through the hole in the blade holder and tighten into the nut.

NOTICE

**The blade bolt threads must extend beyond the nut, with the nut seated flush in the recessed hole.**

4. Torque the blade bolt to the value shown in the torque table on page 34 of this manual.
5. Weld the outside of the bolt head as shown in **Figure 4.7a** left below.

NOTICE

**DO NOT weld bolt head unless the nut is firmly seated into the recessed hole (see Figure 4.7b right below).**

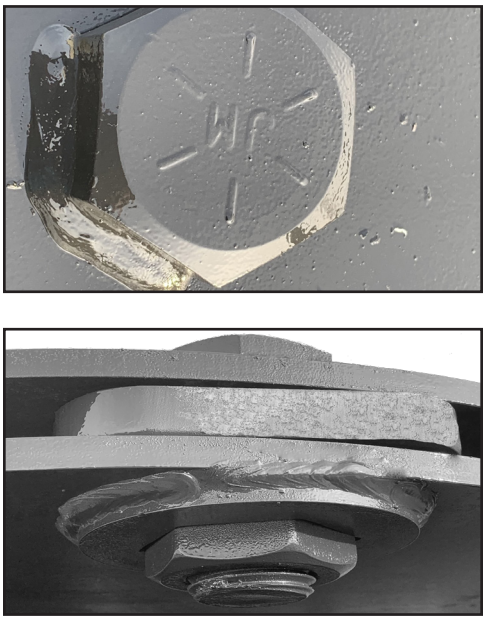


**Figure 4.7a Bolt Head Bead Weld & Assembly**

**Figure 4.7b Bolt Thru Nut**

# 4.8 Bearing Housing & Gearbox Maintenance

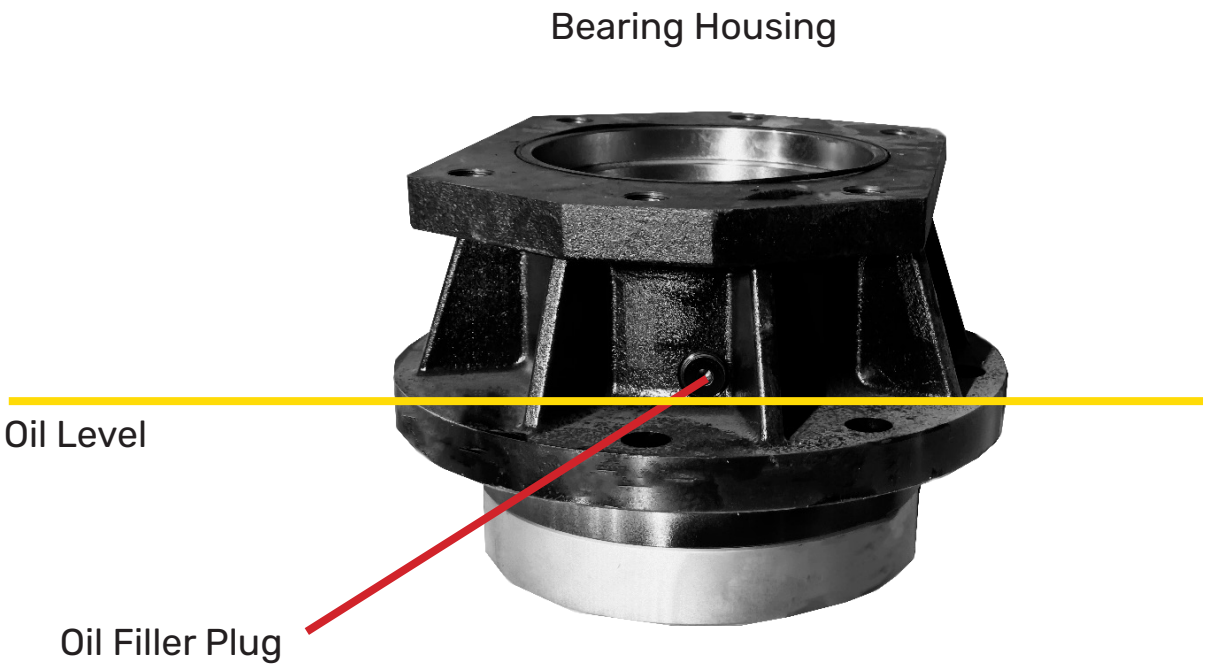
**NOTICE**

**It is recommended that you take your brush cutter to your local dealer to have the bearing housing or gearbox motor serviced.**

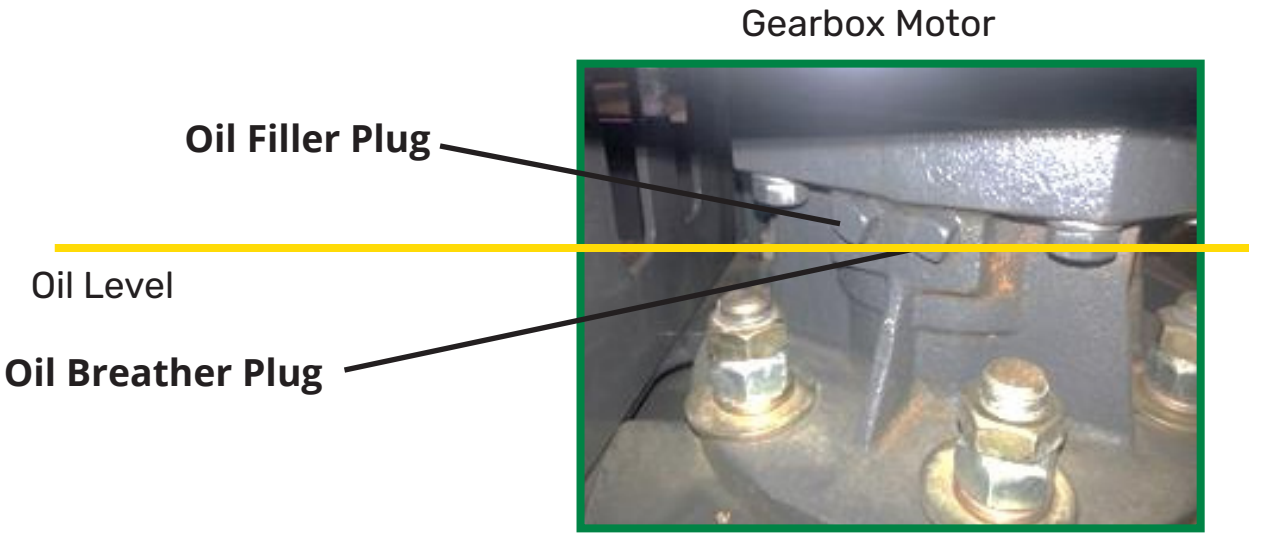
*Note: The following procedures are not specific to any one model. The oil change procedure is similar for both the bearing housing and gearbox motor.*

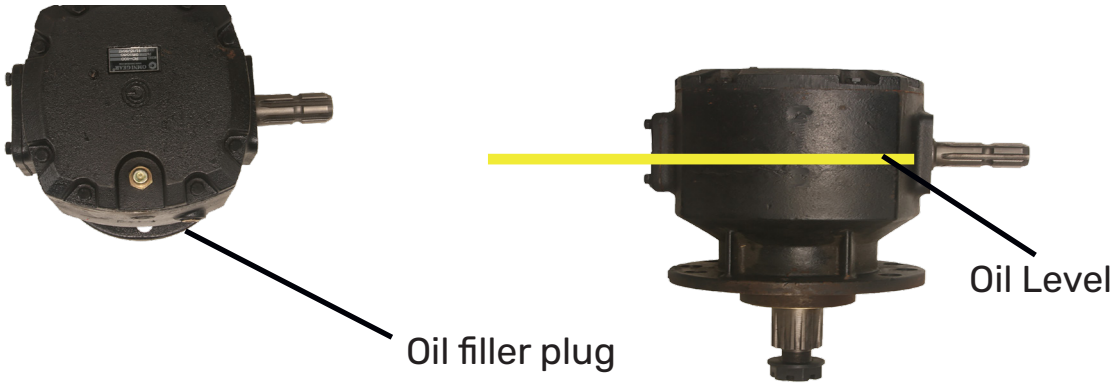
## Checking Fluid Level

1. Remove the motor cover to access the bearing housing. The bearing housing is located below the hydraulic motor.
2. Locate the oil filler plugs and remove one of the plugs.
3. Visually confirm the gear fluid is level to the bottom of the oil filler port.
4. If low, add **85W-140 5EP** grade gear oil. Be sure to check the gear box oil weekly.
5. Reinstall oil filler plug.



# 4.8 Bearing Housing & Gearbox Maintenance Cont.




### Oil Change Procedure

1. Remove oil filler plugs.
2. Insert one end of a discharge hose into the gearbox or bearing housing oil filler ports. Then place the other end into an approved waste oil container.
3. Pump out the used oil from the bearing housing or gearbox motor.
4. Refill the bearing housing and gear box with **85W-140 5EP** grade gear oil. Remove breather plug on bearing housing and check if oil level is at bottom of hole. The gear box oil level should be at mid height of the input spline.
5. Reinstall oil filler plugs.

**NOTICE**

**The initial oil should be changed after 50 hours of operation under load. Subsequent oil changes should take place after every 1000 hours of operation.**

## 4.9 Shear Bolt Replacement

NOTICE

**Only use an *SAE Grade 2* shear bolt or shear pin as a replacement part. Using a hardened bolt may result in damage to the gearbox motor.**

1. Remove the motor cover.
2. Remove the damaged shear bolt from the gearbox input spline.
3. Align the holes in the input spline with the motor coupler and insert new 1/2" diameter x 3.5" shear bolt.
4. Install shear bolt nut, and tighten.

## 4.10 Torque Specification Table

| TORQUE VALUES SAE GRADE 8 | | |
|---|---|---|
|  | DRY lb-ft | LUBRICATED lb-ft |
| 1/4" | 12 | 9 |
| 5/16" | 24 | 18 |
| 3/8" | 45 | 35 |
| 1/2" | 110 | 80 |
| 3/4" | 380 | 280 |
| 7/8" | 600 | 450 |
| 1" | 910 | 680 |

# SECTION 5

# TROUBLESHOOTING

# 5.1 Troubleshooting Chart

| Problem | Cause | Resolution |
|---|---|---|
| Cutter bogs down | Deck is not properly leveled & material is balling under deck | Refer to leveling instructions found in this manual. |
| | Dull blades | Remove and sharpen blades. |
| | Ground speed too fast | Slow down ground speed. |
| | Cutter speed too slow | Raise engine RPMs or investigate other low oil flow problem |
| Vibration felt when running cutter | Missing, loose, damaged or unbalanced cutter blades | Replace blades with new or re-sharpened and equally balanced blades. |
| | Blade mount damaged | Replace blade mount |
| | Gearbox loose on deck | Tighten & torque gearbox mounting bolts. Replace bolts if they are damaged. |
| | Cutting height too low for cutting in sandy or rocky soils | Raise cutter height. |
| Blades get dull too quickly | Blades have contacted solid objects (rocks, steel pipes, etc.) | Clear cutting area of solid objects before hitting them, or raise the cutter height to clear exposed rock surfaces. |
| Blades breaking | Excessive shock loads | Avoid hitting solid objects (rock, steel pipes, large tree stumps, etc.). |
| Hydraulic oil level goes down during operation | Leak at cutter motor or other plumbing | Investigate & repair |
| | Excavator Hydraulic System Leak | Investigate & repair |
| Blades do not spin when flow is activated | Shear bolt between motor and gearbox is sheared | Replace with proper shear bolt specified for this unit. |
| | Motor or gearbox failed | Disconnect the drive chain between motor & gearbox. If blade holder can be turned by hand, motor failure is suspect. Call your dealer for further recommendations. |

# SECTION 6

# SPECIFICATIONS

# 6.1 Specifications Chart

| | STANDARD DUTY EXCAVATOR BRUSH CUTTER | XTREME DUTY EXCAVATOR BRUSH CUTTER | SEVERE DUTY EXCAVATOR BRUSH CUTTER |
|---|---|---|---|
| Height | 26″ | 25″ | 23″ |
| Length | 52″ | 62″ | 54″ |
| Width | 51″ | 64″ | 49″ |
| Weight (w/o mount) | 700 lbs | 1210 lbs | |
| # Blades | 2 | 2 | 3, with 9x mulching teeth |
| Blade Type | 5/8″ AR400 | 5/8″ AR400 | 5/8″ AR400 |
| Hydraulic Flow | 12-17 gpm, 17-24 gpm | 14-20 gpm, 20-26 gpm, 24-30 gpm | 17-35 gpm, +35 gpm |
| Gearbox | RC51 | RC100 | BC75 |
| Cutting Width | 44″ | 50″ | 44″ |
| Tree Cut Capacity | 2″ diameter | 3″ diameter | 6″ diameter |
| Options | 12-29 gpm Star Motor (no case drain) | Debris Chains, 12-29 gpm Star Motor (no case drain), optional knee | |

# SECTION 7

# PARTS INFORMATION

# PARTS INFORMATION

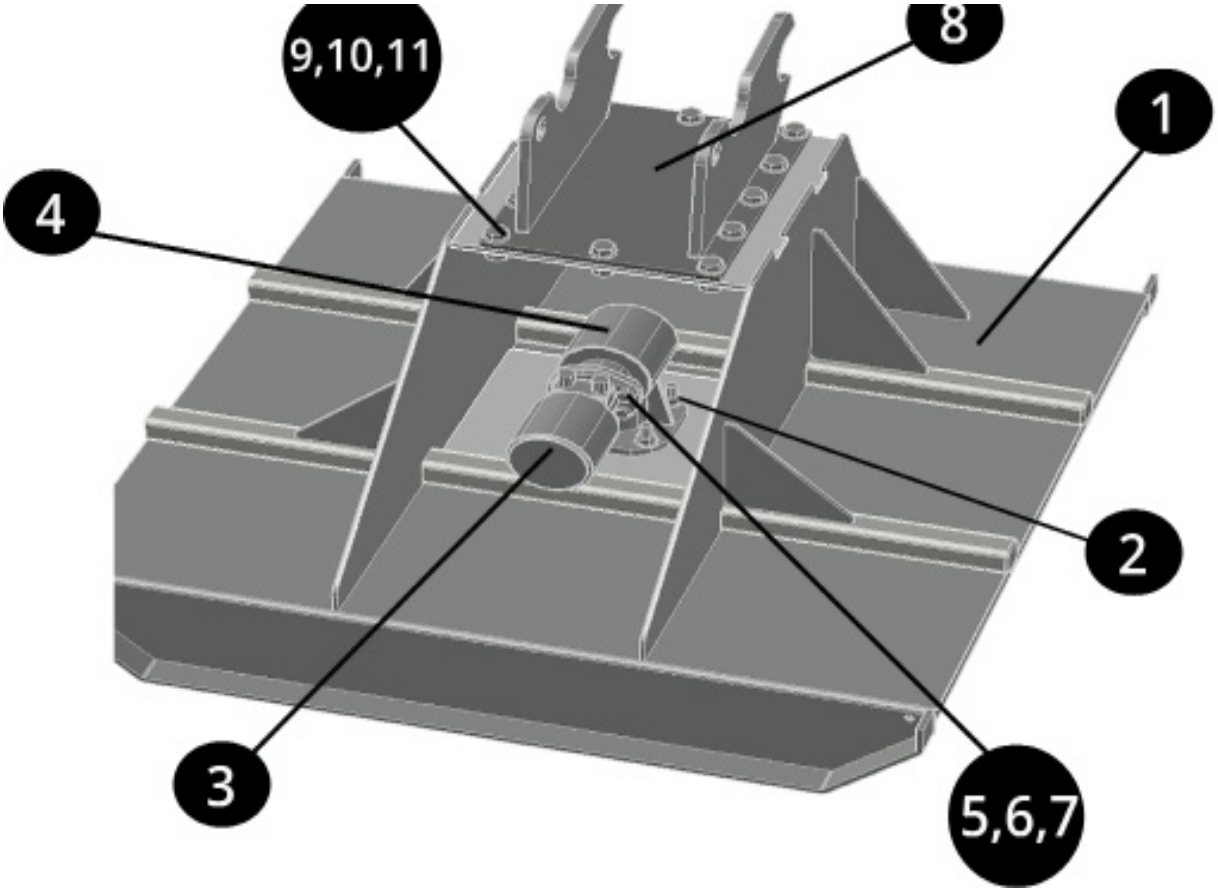
Factory fresh parts specifically designed for your implement are readily available.

For hassle free service and to ensure you receive the correct parts for your implement, please provide your dealer with the following information:

| | |
|---|---|
| Model Number | |
| Serial Number | |
| GPM Requirements | |
| Date of Owners Manual<br>(Bottom Left Corner of Cover Page) | |
| Parts Diagram Page Number | |
| Part Description | |
| Reference # | |
| Quantity Desired | |
| Ship To Information | |
| Bill To / Payment Information | |

**Use Genuine Parts from Construction Implements Depot, Inc.**

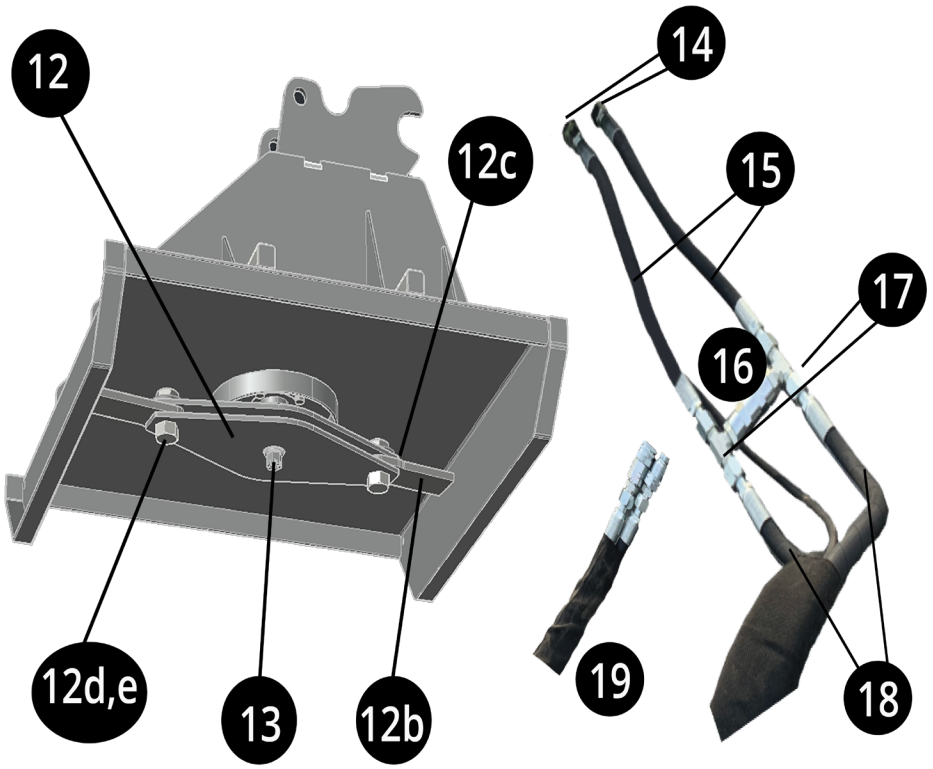
## Standard Excavator Brush Cutter




| Ref. No | Part Description | Qty |
|---|---|---|
| 1 | Cutter Deck Weldment | 1 |
| 2 | Motor Mount Bolts 1/2" - 20 UNF - 1.5 | 4 |
| 3 | Motor (BMSY 100) | 1 |
| 4 | Gearbox (RC51) | 1 |
| 5 | Gearbox Mount Bolts 5/8"-11 UNC - 2.75" | 4 |
| 6 | Gearbox Mount Washers 5/8" | 4 |
| 7 | Gearbox Mount Nuts 5/8" - 11 UNC Lock Nut | 4 |
| 8 | Excavator Hook up (KX161 shown) | 1 |
| 9 | Excavator Hook up bolts (3/4" - 10 UNC - 2") | 12 |
| 10 | Excavator Hook up washers (3/4") | 24 |
| 11 | Excavator Hook up nuts ( 3/4" - 10 UNC lock nut) | 12 |

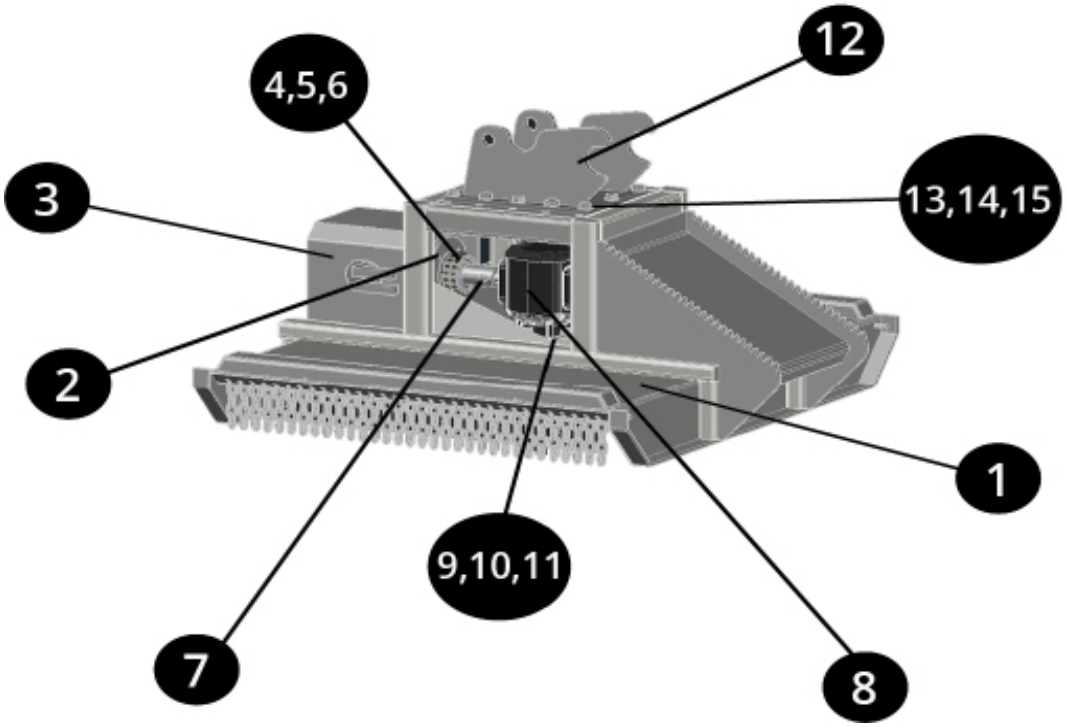
## 7.1 Parts Diagrams

### Standard Excavator Brush Cutter




| Ref. No | Part Description | Qty |
|---|---|---|
| 12 | Blade Holder Assembly | 1 |
| 12a | Blade Holder (top and bottom) | 1 ea |
| 12b | Blades (5/8" Swing Cutter Blades) | 2 |
| 12c | Blade Bushings ( 2.125 x 1.5 x .6875 ) | 2 |
| 12d | Blade Bolts (1.5 - 6 UNC - 3") | 2 |
| 12e | Blade Nuts (1.5 - 6 UNC) | 2 |
| 13 | RC51 Castle Nut to retain blade holder | 1 |
| 14 | JIC Adapter (motor to hose) | 1 |
| 15 | Hose (Motor to H-Valve Assembly) | 2 |
| 16 | H-Valve Assembly (one way check valve w/tees) | 1 |
| 17 | Tees | 2 |
| 18 | Hose (H-Valve Assembly to main quick disconnect) | 2 |
| 19 | Main Quick Disconnect Set | 1 |

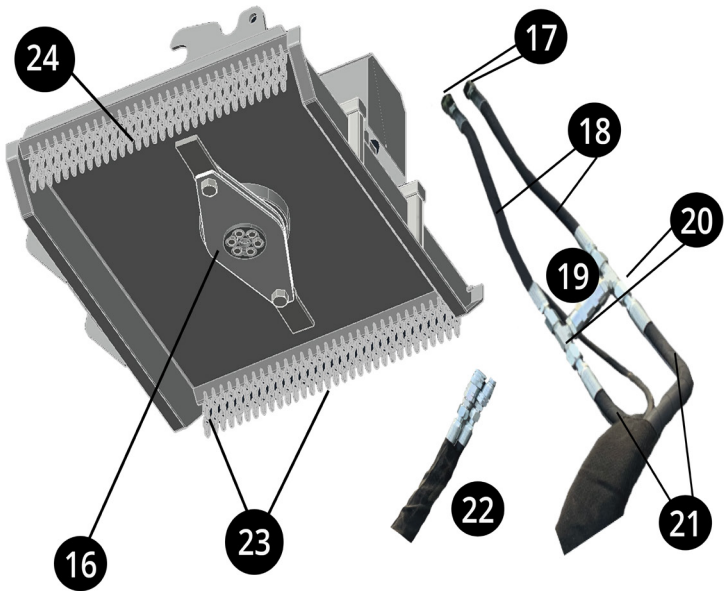
## Xtreme Excavator Brush Cutter




| Ref. No | Part Description | Qty |
|---|---|---|
| 1 | Cutter Deck Weldment | 1 |
| 2 | Motor Mount Bolts 1/2" - 20 UNF - 1.5 | 4 |
| 3 | Motor (Parker 16-26 gpm) | 1 |
| 4 | Chain Coupler Sprocket - motor side | 1 |
| 5 | Chain Coupler Sprocket - Gear box side | 1 |
| 6 | Chain coupler chain | 1 |
| 7 | Shear Bolt & Nut (1/2" - 13 UNC 3.5" w/locknut) | 1 |
| 8 | Gearbox (RC100) | 1 |
| 9 | Gearbox Mount Bolts (3/4" - 10 UNC - 2.75") | 6 |
| 10 | Gearbox Mount Washers (3/4") | 6 |
| 11 | Gearbox Mount Nuts (3/4" - 10 UNC lock nut) | 6 |
| 12 | Excavator Hook up (KX161 shown) | 1 |
| 13 | Excavator Hook up bolts (3/4" - 10 UNC - 2") | 12 |
| 14 | Excavator Hook up washers (3/4") | 24 |
| 15 | Excavator Hook up nuts ( 3/4" - 10 UNC lock nut) | 12 |

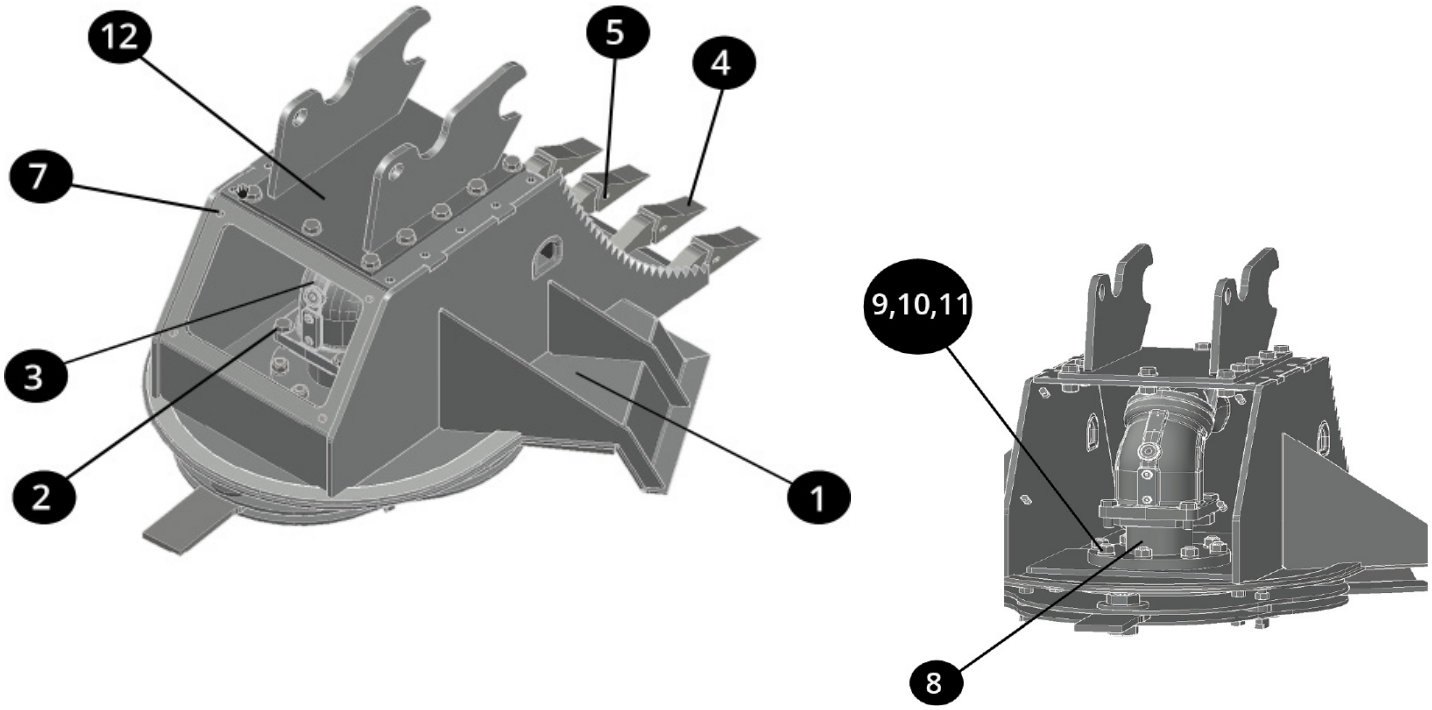
# 7.1 Parts Diagrams

## Xtreme Excavator Brush Cutter




| Ref. No | Part Description | Qty |
|---|---|---|
| 16 | Blade Holder Assembly | 1 |
| 16a | Blade Holder (top and bottom) | 1 ea |
| 16b | Blades (5/8" Swing Cutter Blades) | 2 |
| 16c | Blade Bushings ( 2.125 x 1.5 x .6875 ) | 2 |
| 16d | Blade Bolts (1.5 - 6 UNC - 3") | 2 |
| 16e | Blade Nuts (1.5 - 6 UNC) | 2 |
| 17 | JIC Adapter (motor to hose) | 2 |
| 18 | Hose (Motor to H-Valve Assembly) | 2 |
| 19 | H-Valve Assembly (one way check valve w/tees) | 1 |
| 20 | Tees | 2 |
| 21 | Hose (H-Valve Assembly to main quick disconnect) | 2 |
| 22 | Main Quick Disconnect Set | 1 |
| 23 | Chain Sections (5 link) | 64 |
| 24 | Chain Rods | 2 |

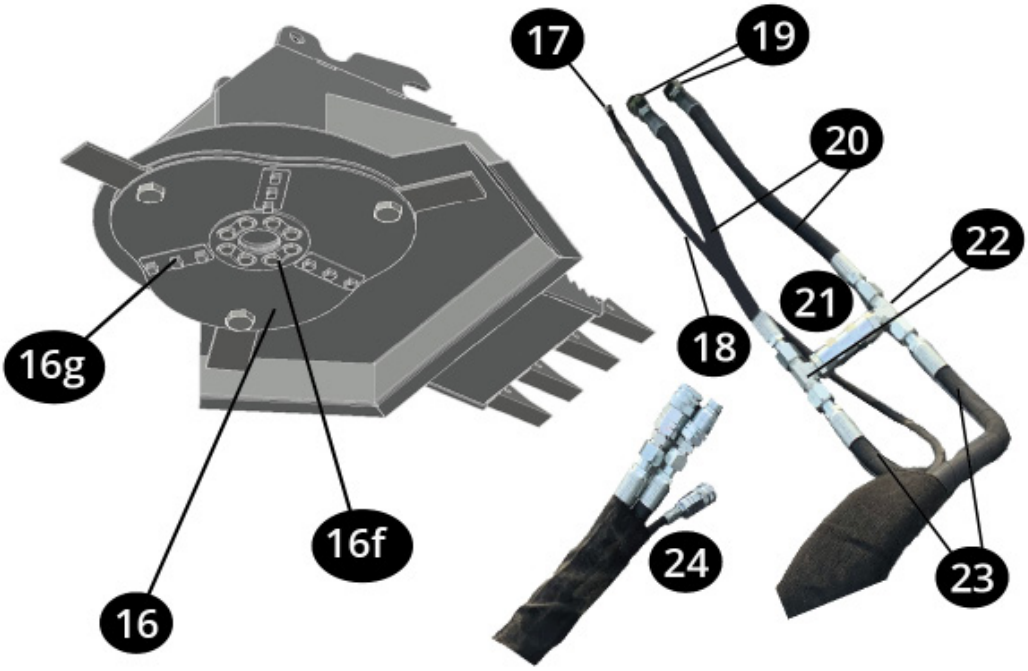
## Severe Excavator Brush Cutter




| Ref. No | Part Description | Qty |
|---|---|---|
| 1 | Cutter Deck Weldment | 1 |
| 2 | Motor Mount Bolts 3/4" - 10 UNF - 2" | 4 |
| 3 | Motor (Parker Bent Axis Piston F12) | 1 |
| 4 | Cutting Edge Teeth | 4 |
| 5 | Teeth Pins | 4 |
| 6 | Motor Cover (not shown) | 1 |
| 7 | Motor Cover Bolts (5/16" - 18 - UNC - 1") | 4 |
| 8 | Gearbox (BC75) | 1 |
| 9 | Gearbox Mount Bolts (3/4"-10-UNC-2.75" HEX cap) | 8 |
| 10 | Gearbox Mount Washers (3/4" split lock washers) | 8 |
| 11 | Gearbox Mount Nuts (3/4" - 10 UNC lock nut) | 8 |
| 12 | Excavator Hook up (KX161 shown) | 1 |
| 13 | Excavator Hook up bolts (3/4" - 10 UNC - 2") | 12 |
| 14 | Excavator Hook up washers (3/4") | 24 |
| 15 | Excavator Hook up nuts ( 3/4" - 10 UNC lock nut) | 12 |

# 7.1 Parts Diagrams

## Severe Excavator Brush Cutter




| Ref. No | Part Description | Qty |
|---|---|---|
| 16 | Blade Holder Assembly | 1 |
| 16a | Blade Holder (top and bottom) | 1 ea |
| 16b | Blades (5/8" Swing Cutter Blades) | 3 |
| 16c | Blade Bushings ( 2.125 x 1.5 x .6875 ) | 3 |
| 16d | Blade Bolts (1.5 - 6 UNC - 3") | 3 |
| 16e | Blade Nuts (1.5 - 6 UNC) | 3 |
| 16f | Blade Holder Mount Bolts (3/4"-16 UNF - 2.75") | 8 |
| 16g | Mulching Teeth 1.5" | 9 |
| 16h | Mulching Teeth Nuts (5/8" - 11 UNC locknut) | 9 |
| 17 | JIC Adapter (motor to case drain) | |
| 18 | Case Drain Hose | 1 |
| 19 | JIC Adapter (motor to hose) | 2 |
| 20 | Hose (Motor to H-Valve Assembly) | 2 |
| 21 | H-Valve Assembly (one way check valve w/tees) | 1 |
| 22 | Tees | 2 |
| 23 | Hose (H-Valve Assembly to main quick disconnect) | 2 |
| 24 | Main Quick Disconnect Set | 1 |

# SECTION 8

# WARRANTY INFORMATION

# Limited Warranty

Construction Implements Depot, Inc. products are warranted to be free from defects in workmanship or materials for a period of 12 months from the initial sale, lease or rental date.

## Warranty Exclusions

This warranty does not cover normal wear items, including but not limited to: bearings, hoses, ground engaging parts such as teeth, blades, cutting edges, pilot bits, auger teeth and broom bristles. This warranty does not cover maintenance, service or adjustments. This warranty does not cover damage due to misuse, negligence, accidents, improper maintenance or modifications of this product. This warranty is void if any components have been disassembled, i.e., pumps, gear boxes or motors. Specially modified attachments built by CID X-treme Attachments to meet your customers' needs shall not be warranted by Construction Implement Depot, Inc. This warranty does not cover replacement parts not supplied by CID, Inc.

## Warranty Statement

Our obligation under this Limited Warranty shall be solely limited to repairing or replacing any part (see non-covered items above) free of charge that, according to our judgment, show evidence of a defect in quality of workmanship or materials for the stated 12 month warranty period. All defective parts must be routed directly to CID, Inc. with freight or delivery charges to be prepaid. This limited warranty shall not be interpreted to render CID, Inc. liable for any injury or damage to persons, businesses or property of any kind nor expenses or losses incurred for labor, supplies, substitute machinery rental or for any other reason. Repair or replacement parts are subject to the supply conditions at the time of repair or replacements, which may directly affect our ability to obtain material and/or replacement parts. CID, Inc. reserves the right to make improvements in design or changes in specifications at any time without incurring any obligations to owners of previously purchased products. No one but CID, Inc. is allowed to alter, modify or enlarge this warranty nor the exclusions, limitations and reservation at any time.

## Warranty Service Procedure

RGA (Returning Goods Authorization) Policy:

If repairs are required, CID must obtain an RGA number from the manufacturer of the defective part and proof of purchase. RGA and services are rendered by CID only. Any responsibility of shipping costs on any item returned for repair is at the discretion of CID. All returned parts must have:

1. A legible RGA number written on the outside of the package.
2. A Service Request Form.
3. The defective part.

RGA numbers are only valid for 30 days from the date of issue. All shipped replacement parts will require a PO number from the original CID Customer. If the defective part is rendered non-warranty, the PO number will be invoiced for the replacement. Should you have any problems with your attachment, please follow the following procedures to obtain service.

1. Call the Warranty Department at (336) 859-2002 ext 215. You will need to provide the model and serial number of the defective item(s), a description of the problem and have photographs available.
2. Upon a warranted issue, visit www.cidattachments.com, click on the warranty tab, and fill in the warranty information. CID will retain an RGA number from the manufacturer of the defective part. If all the information above is fulfilled the manufacturer will issue an RGA number.
3. Obtain a PO number from the original CID customer. PO numbers will be invoiced in the event the defective part(s) is un-warranted
4. CID will ship a replacement part with a Service Request Form and RGA #. There will be a call tag with the Manufacturer's address and instructions for returning the defective part.
5. Once the defective part is warranted by the manufacturer, CID will be issued a credit and the PO number will be void.
6. In the event the manufacturer renders that the attachment be returned to CID for repair, CID will make arrangements for pickup and return. Repairs will be performed by CID qualified technicians. Non-warranted issues will be discussed and repairs will be performed upon agreement of the owner, and payment for parts and labor will be issued.

# SAFETY ACKNOWLEDGEMENT FORM

**ATTN ALL OPERATORS:** **Print your name, sign and date in the boxes below to acknowledge that you have read and fully understand the safety instructions presented in this manual, and have been trained on how to safely operate this attachment.**

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# SECTION 9

# MAINTENANCE LOG

# MAINTENANCE LOG

Use this log sheet to document all routine maintenance and repair services performed on this machine.

| DESCRIPTION OF MAINTENANCE | SERVICED BY | DATE |
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# MAINTENANCE LOG

Use this log sheet to document all routine maintenance and repair services performed on this machine.

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MADE IN
USA


DENTON
NORTH CAROLINA

CID CONSTRUCTION IMPLEMENTS DEPOT INC.
X-treme Attachments

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