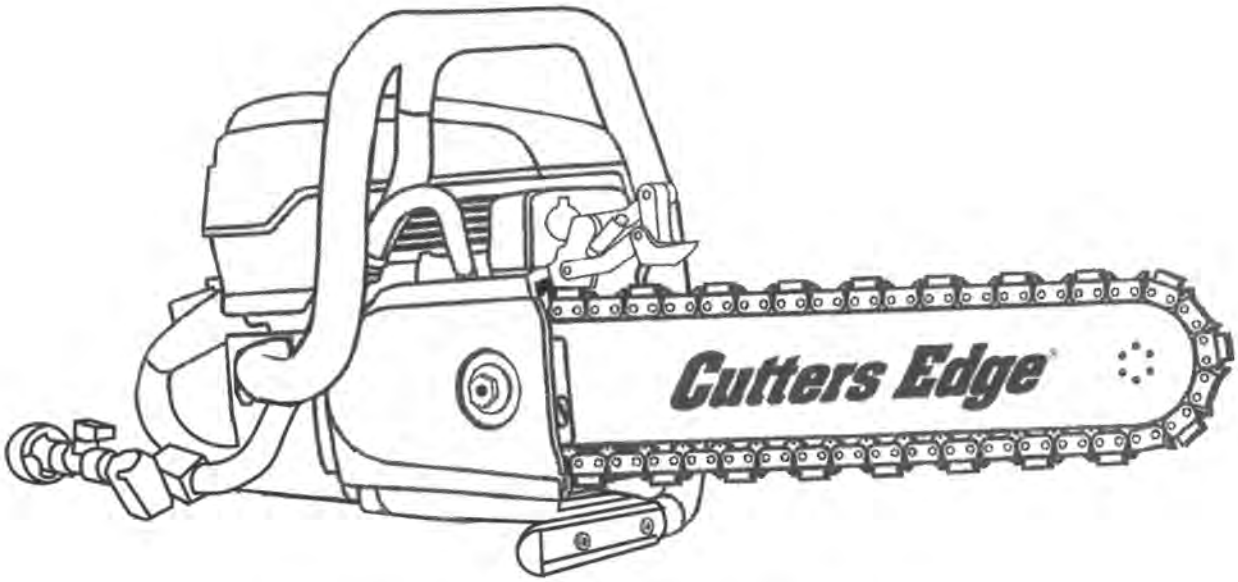

CE94CRS CONCRETE RESCUE SAW

Owner's Manual

Cutters Edge
FIRE RESCUE SAWS

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INTRODUCTION

This manual outlines the maintenance and operation of Cutters Edge manufactured products.

The CE94CRS concrete rescue saw is designed to cut concrete, stone, and masonry when used with the appropriate genuine diamond chain.

To get the maximum benefit from your saw, and ensure maximum safety, be sure to read this manual thoroughly, and periodically review safety instructions.

TABLE OF CONTENTS

SYMBOLS & LABELS

THE FOLLOWING SYMBOLS & DEFINITIONS ARE FOUND THROUGHOUT THIS MANUAL AND ARE DESIGNED TO MAKE YOU AWARE OF POTENTIAL HAZARDS OR UNSAFE PRACTICES.

⚠ WARNING **A potentially hazardous situation exists which, if not avoided, could result in death or serious injury.**

⚠ CAUTION **A potentially hazardous situation exists which, if not avoided may result in minor or moderate injury or property damage.**

IMPORTANT **A potential situation exists which, if not avoided, may result in product or property damage.**

THE FOLLOWING SYMBOLS & LABELS MAY BE FOUND IN THIS MANUAL OR ON THE SAW

Read the operator's manual carefully and understand the contents before you use this equipment.

Always use:

- **Protective helmet**
- **Ear Protection**
- **Protective glasses or full face protection**

Wear hand protection

⚠ WARNING **A potentially hazardous situation exists which, if not avoided, could result in death or serious injury.**

Chain breakage can result in high-speed ejection of parts, which can result in death or serious injury to operators or bystanders. The items listed below are critical to minimizing the risk of chain breakage and injury.

- **DO NOT operate a concrete chain saw with a damaged, modified, broken, or missing side cover, bottom guard, or guard flap. The side cover, bottom guard, and guard flap provides protection against contact with moving parts, ejected debris, broken diamond chain, thrown water and concrete slurry.**
- **DO NOT operate saw with loose, missing, damaged or improperly repaired parts.**
- **DO NOT insert saw into a slot narrower than the chain segments. Rapid pushback might occur. Reference: Most diamond segments are .225 inches (5.72 mm) wide.**
- **DO NOT use damaged, modified or improperly repaired chain.**
- **DO NOT run saw upside-down. Concrete debris can fly back into the operator's face.**
- **DO NOT cut ductile iron pipe with the concrete chain saw. Segment loss or diamond chain breakage may occur.**

⚠ CAUTION **A potentially hazardous situation exists which, if not avoided may result in minor or moderate injury or property damage.**

- **Always turn a concrete chain saw OFF when performing maintenance on the saw including chain tensioning.**
- **Never use equipment that is not functioning properly.**
- **Have the saw repaired only by qualified service personnel.**
- **Turn engine OFF before refueling. Keep away from open flame. Always provide adequate ventilation when handling fuel. Move saw at least 10 feet (3 m) away from refueling area before starting.**
- **Diamond chains require a minimum water pressure of 50 psi (3.5 Bar). Insufficient water supply may result in excessive wear to the chain, which can lead to loss of strength and chain breakage, and/or damage to the guidebar nose sprocket.**
- **Never start saw unless the bar, chain and side cover are properly installed.**

GENERAL SAFETY PRECAUTIONS

- **Always wear protective clothing, including hard hat, eye protection, hearing protection, and gloves.**
- **Avoid loose fitting clothing.**
- **Perform safety checks before starting each day.**
- **Always operate tool with solid footing and with both hands on the saw.**
- **Remove or control slurry to prevent slippery conditions while cutting.**
- **Be sure there are no obstructions (plumbing, electrical conduit, air ducts) and no unnecessary people present.**
- **Set up a well-marked safety zone with a roped boundary and clear signs.**
- **Provide adequate ventilation when working in an enclosed area. Breathing exhaust gases is dangerous.**
- **To avoid electrocution, check for live electrical wiring near cutting area.**

IMPORTANT **A potential situation exists which, if not avoided, may result in product or property damage.**

Note: The concrete chain saw is equipped with a 2-cycle engine and must always be run using a mixture of gasoline and Cutters Edge 2-cycle engine oil, or other high quality 2-cycle oil that has been formulated for air cooled power equipment. It is important to accurately measure the amount of oil to be mixed to ensure that the correct mixture is obtained. When mixing small amounts of fuel, even small inaccuracies can drastically affect the ratio of the mixture.

- **This engine is designed to be operated on premium unleaded gasoline.**
- **Use high quality, unleaded gasoline with a minimum octane rating of 90. If lower octane gasoline is used, engine temperature will increase which can result in a piston seizure and damage to the engine.**
- **Fuel mixture: 100:1 Cutters Edge or 25:1 petroleum based oil – gasoline/oil mixture. Incorrect fuel mixture is the number one cause of piston seizure.**
- **Use Cutters Edge brand 2-cycle engine oil, or other high quality 2-cycle oil that has been formulated for air cooled power equipment.**
- **Never use 2-cycle oil formulated for water-cooled 2-cycle engines, such as outboard motor oil.**
- **Never use motor oil intended for 4-stroke engines.**

ENGINE BREAK-IN

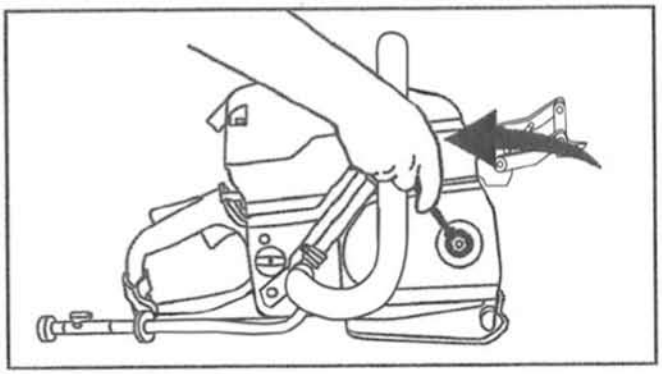
- **It is very important to break-in a new engine to "seat" all moving parts, especially the piston rings.**
- **To break-in the engine, run one full tank of 100:1 fuel at idle, cycling the throttle every 5 to 10 minutes to prevent loading.**
- **Failure to break-in an engine may result in piston seizure.**

CE94CRS TECHNICAL DATA

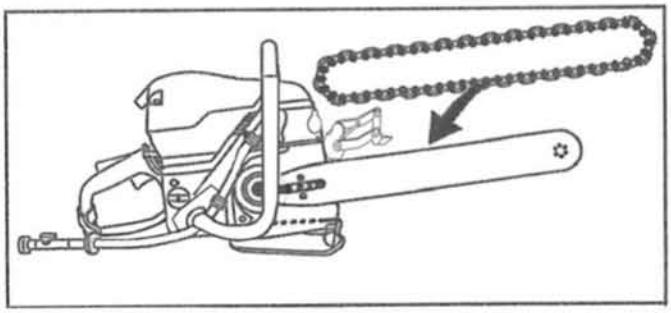
Engine Type	2-stroke, Air Cooled
Displacement	5.7 cu-in (94 cc)
Horsepower	6.4 hp (4.8 kW) @ 9000 rpm
Torque	50.4 in-lbs (5.7 Nm) @ 7,200 rpm
Engine Speed	9,300 +/- 150 rpm (max) 2,700 +/- 100 rpm (idle)
Weight	22.25 lbs (10.1 kg) powerhead only
Dimensions	18 in (46 cm) length 14 in (36 cm) height 13 in (33.02 cm) width
Air Filter	Water resistant polyester
Carburetor	Walbro RWJ-5A
Starter	Dust and water resistant
Ignition	Momentary contact on/off switch
Clutch	Centrifugal, three shoe, three spring
Fuel Ratio	100:1 Cutters Edge synthetic 2-cycle Oil
Fuel Capacity	0.26 gallon (1 liter)
Water Supply	Minimum 50 psi
Water Flow	Minimum 2.5 gpm
Noise Level	106 dB(A) at 3 ft (1 m)
Vibration Level	3.9 m/s (front handle) 4.1 m/s (rear handle)
Engine Break-in Period	One tank, without cutting, cycling throttle
Spark Plug	NGK BPMR7A OR Champion RCJ6Y Electrode gap 0.020 in (0.5 mm)
Available Bar Lengths	12 inch (30.48 cm) 14 inch (35.56 cm) 16 inch (40.64 cm)
Cutting Depth for Each Length	12 inch (30.48 cm) 14 inch (35.56 cm) 16 inch (40.64 cm)

SET-UP

GUIDEBAR AND DIAMOND CHAIN INSTALLATION

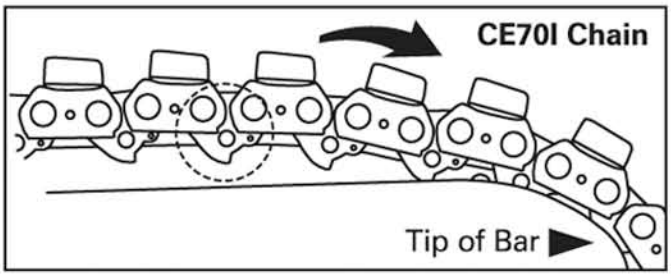


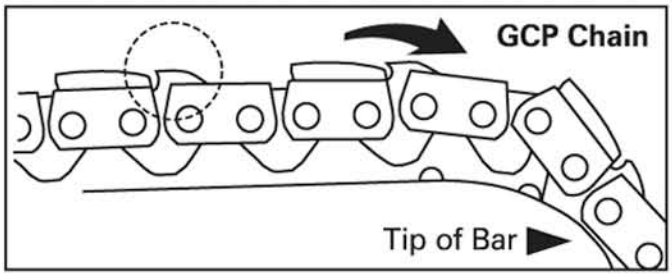
STEP 1
Loosen side cover nut and remove side cover.

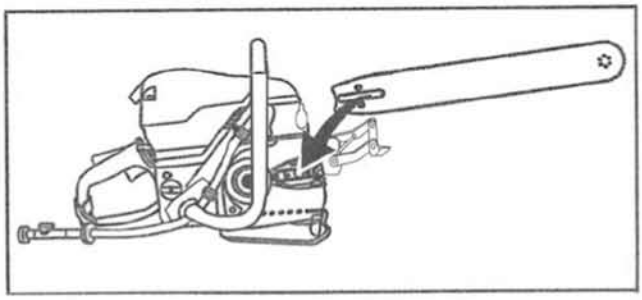


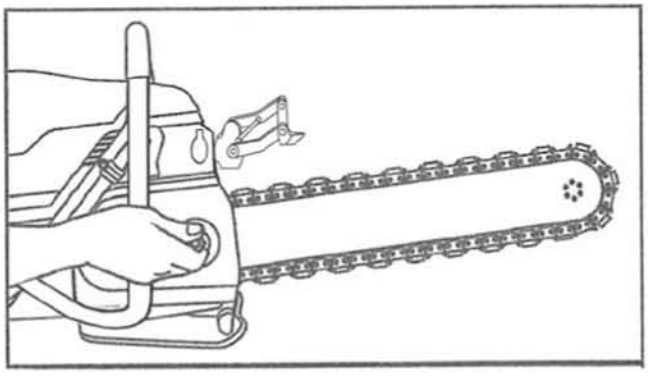
STEP 3
Mount the diamond chain on the guidebar starting at the drive sprocket and continue over the guidebar nose.

NOTE: CE70l and GCP Chains install differently.



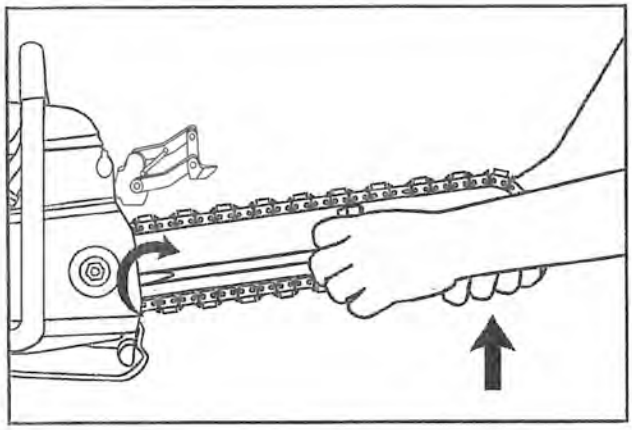






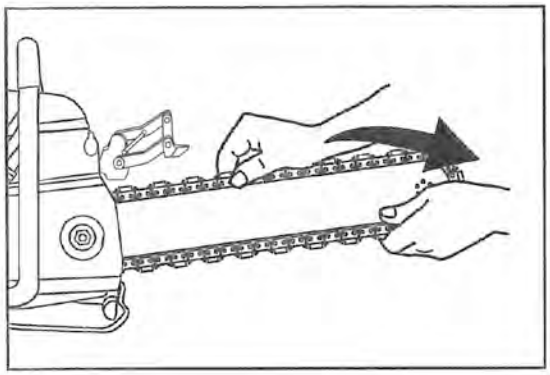
STEP 2
Place bar onto stud and engage alignment block.

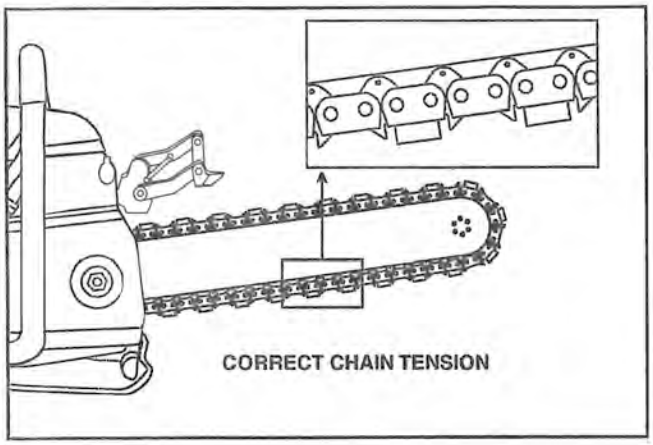
STEP 4
Install the side cover and ensure chain adjustment pin engages hole in bar. Do not fully tighten side cover nut until after chain is properly tensioned.



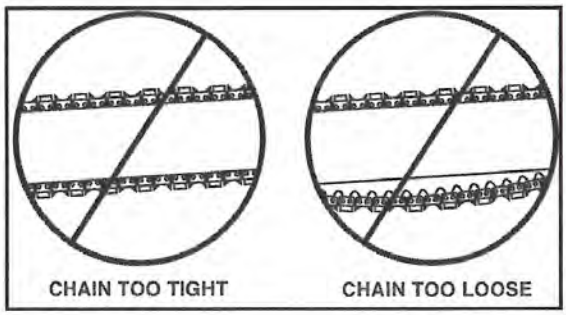
CORRECT CHAIN TENSION
All chains have a tendency to stretch when used. Diamond chains stretch more than wood cutting chains because of the abrasive materials they are cutting.
If the chain is too tight, a lot of the saw's power goes into turning the chain rather than into the cut. In extreme over-tightened cases, the saw may not be able to turn the chain at all. In addition, damage can occur to the bar nose and premature stretch may occur.

STEP 5
Make sure that all the drive links are inside the guidebar groove then lift the bar nose and tension the chain by turning the screw clockwise.

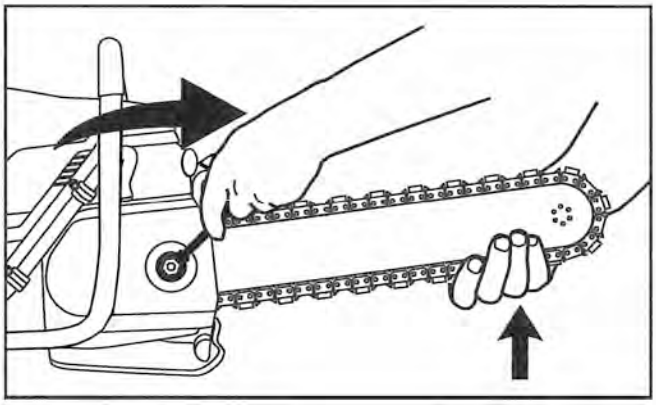




STEP 6
Before cutting, check for proper tension by pulling the chain around the bar by hand. If you cannot easily pull by hand, the chain is too tight and needs to be loosened slightly. CAUTION: Be aware that the guidebar rails may develop sharp edges over time so always pull the diamond chain by the diamond segments.

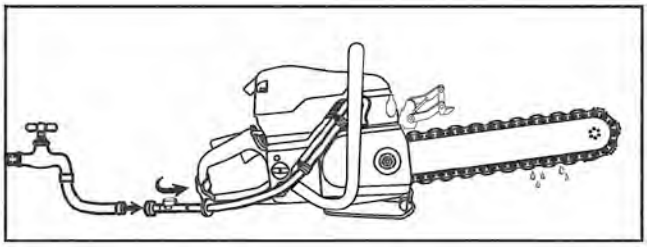


CHAIN TOO LOOSE
If the chain is too loose, it could come off the bar, or it will allow the drive sprocket to spin without turning the chain, which can chew up drive links.
When a chain stretches to a point where the drive links are hanging approximately 1/2 in (12 mm) to 3/4 in (18 mm) below the bar, it is time to tension the chain.



STEP 7

Continue to lift up on the nose of the guidebar and firmly tighten the side cover nut.
NOTE: To prevent chain tensioner breakage, be sure the side cover nut is tightened to approximately 20-25 ft-lbs (27-33 Nm).



STEP 8

Attach to water source with pressure of not less than 50 psi (3.5 Bar).

OPERATION

FUEL HANDLING

⚠ CAUTION **FUEL MIXTURE: 100:1 Cutters Edge synthetic 2-cycle oil gasoline/oil mixture.**

GASOLINE	OIL
US Gallon	US FL oz.
1	1.3
2 1/2	3.2
5	6.4

GASOLINE	OIL
Liters	ml
1	10
5	50
10	100
20	200

- **Use premium unleaded gasoline with a minimum octane rating of 90. If lower octane gasoline is used, engine temperature will increase which can result in a piston seizure and damage to the engine.**
- **Always provide adequate ventilation when handling fuel.**
- **Use caution when handling gasoline. Avoid direct contact with skin or inhaling fuel vapor.**

FUEL MIXING

- **Always mix gasoline and oil in a clean container intended for use with fuel.**
- **Keep fuel container closed tightly to prevent moisture from getting into the fuel.**
- **Always begin mixing fuel by adding half the amount of gasoline to be used. Then add the correct amount of 2-cycle oil for 100:1 (1%) mixture and finish filling the container with gasoline.**
- **Do not mix more than one month's supply of fuel. This helps prevent the separation of the 2-cycle oil from the gasoline (varnishing).**
- **If the saw is not used for an extended period of time (3 months) the fuel tank should be emptied and cleaned.**

FUELING

- **Always shut off the saw before fueling.**
- **Before fueling, clean the area around the fuel cap to prevent dirt from contaminating the fuel. Contamination of the fuel tank can lead to saw malfunction.**
- **Thoroughly mix the fuel in its container before fueling.**
- **Slowly open the fuel cap to release any pressure that may have built up in the tank.**
- **After adding fuel, tighten the fuel cap carefully and secure with a wrench.**

STARTING AND STOPPING A CONCRETE CHAIN SAW

⚠ WARNING **Never start a concrete chain saw without the bar, chain and side cover properly assembled. Failure to do so may result in serious injury.**

⚠ CAUTION **Always move a concrete chain saw at least 10 feet (3 m) away from fueling area before starting.**

IMPORTANT **Place the saw on clear ground. Ensure that secure footing is established and chain is not contacting any objects.**

COLD ENGINE STARTING PROCEDURE

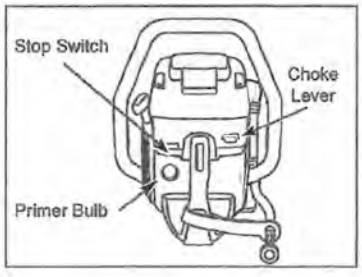
1. **Pull the choke lever out, which also sets the throttle lock.**
2. **Depress primer bulb approximately 5-10 times.**
3. **Push in decompression valve.**
4. **Open the water valve ¼ turn.**
5. **Place the saw on stable ground making sure the chain is free of any obstructions.**
6. **Place foot on the base of the rear handle, and place one hand on front handle.**
7. **With opposite hand, slowly pull starter handle until the starter pawls engage.**
8. **Pull the starter cord (***hard, fast, short pulls***) *until engine initially fires or "pops".* Could be as many as 10-15 pulls.**
9. ***Push the choke lever in.***
10. **Pull the starter cord until engine starts – should be 1 to 2 pulls.**
11. **Release the throttle lock by momentarily squeezing on the throttle trigger.**
12. **When the engine starts, allow the engine to idle briefly. Squeeze the throttle trigger several times to help warm up the engine.**
13. **Open the water valve completely.**

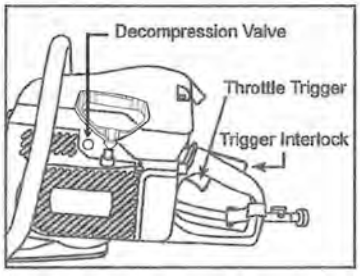
WARM ENGINE STARTING PROCEDURE

1. **Use the same procedure as starting a cold engine, but pull choke lever out, and *then push back in* to set the throttle lock. If choke is used on a warm engine, the carburetor will flood with gas.**
2. **If the engine does not start in 3 hard, fast pulls with the throttle locked, fully squeeze and hold the trigger while pulling the starter cord 3 more times.**
   NOTE: To hold the trigger <u>fully</u> open it may be necessary to insert right foot into rear handle opening and twist.

STOPPING THE SAW

- **To turn the engine off, push stop switch to the 'STOP' position. Close water valve.**





PRE-CUT CHECKLIST

- **Ensure proper chain tension: The chain should be easily pulled around the guidebar by hand.**
- **Ensure all safety devices are properly mounted and functional and that all controls are in proper working order.**
- **Be sure there are no obstructions (plumbing, electrical conduit, air ducts) and no unnecessary people present.**
- **Always wear protective clothing, including hard hat, eye protection, hearing protection, non-slip safety boots, and gloves. Avoid wearing loose clothing.**
- **Adequate water supply and pressure:**
  Minimum flow: 2.5 gpm (9.5 lpm)
  Minimum water pressure: 50 psi (3.5 bar)
- **Diamond chains require a minimum water pressure of 50 psi (3.5 bar).**

IMPORTANT

The single most important factor an operator can control to increase chain life is to use adequate water pressure. Insufficient water supply will result in excessive wear to the chain, which can lead to loss of strength and chain breakage, and/or damage to the guidebar nose sprocket.

PLANNING THE CUT

- **Select the proper chain type for the material being cut.**
- **Outline the cut with a permanent marker for visual cutting guide.**
- **Avoid pinching the guidebar and chain. Always cut the bottom of an opening first, then top, and then the sides. Save the easiest cut for last.**
- **For the straightest cuts use the "Step Cut" method. First score the entire cut line approximately a half-inch deep using the nose of the bar. Next, deepen the cut by about two inches. Then plunge all the way through and complete the cut using the Wall Walker.**
- **Be sure cut concrete cannot fall and injure operator or bystanders. Concrete is very heavy, one cubic foot = 12 in x 12 in x 12 in = 150 lbs (30 cm x 30 cm x 30 cm = 68 kg).**
- **Check for and remove any obstructions (plumbing, electrical conduit, air ducts, etc,) that may interfere with the cut.**

CUTTING WITH THE CE94CRS

To start a cut, hold trigger on full throttle and slowly plunge the nose of the bar straight into the wall. Lengthen the cut and engage the point of the Wall Walker.

CUTTING TIPS

- **Always operate the concrete chain saw at full throttle. If too much force is applied, the saw will lug or stall. The chain will not have enough speed to cut effectively. If too little feed force is applied, the diamonds will skid and glaze over.**
- **For straighter cuts use the "Step Cut" method. First score the entire cut line with the nose of the guidebar approximately ½ in (12 mm) to 1 in (25 mm) deep. Next, deepen the cut by about 2 in (50 mm). This groove will help guide the guidebar for a straight cut. Then plunge all the way through and complete the cut using the Wall Walker.**
- **Plunge cut instead of starting at the top surface of the wall. This will reduce chatter, extend diamond life, create a straighter cut and more quickly enable the use of the Wall Walker.**

USING THE WALLWALKER®

The Wallwalker® is a high efficiency device designed to create a mechanical advantage and feed force. As the operator pushes the saw forward into the material being cut, the upward pivoting action of the Wallwalker® forces the saw downward creating a mechanical advantage. Use the Wallwalker® to cut efficiently and reduce fatigue.

The Wallwalker® is a lever system that converts forward force to downward force and will develop a 4-to-1 mechanical advantage.

- ***To use correctly, make the initial plunge cut and cut downward an inch or two to open the length of the cut to accept the Wallwalker®. Engage the point of the Wallwalker® into the cut and push straight in (forward), wedging the Wallwalker® point into the cut.***
- ***As you continue to push the saw forward into the cut, the Wallwalker® will begin to rotate up and feed force will develop downward along the line of the intended cut. While you are pushing the saw forward and the Wallwalker® is rotating up, the upward action of the Wallwalker® will begin to force the back handle of the saw down. Pull the back handle of the saw upward to counter the downward force and keep the saw perpendicular to the material being cut, otherwise the Wallwalker® point could skid and slip, which will reduce its effectiveness.***
- ***Once the Wallwalker® is fully rotated upwards, pull the saw out of the cut a few inches. The Wallwalker® point will snap back to its original position and you can re-engage the point of the Wallwalker® back into the cut and continue to cut and repeat.***
- **When cutting heavy rebar, slowly "rock" the saw so that you're always cutting concrete as well as steel. This will help keep the diamonds exposed. Also, expect less chain life when cutting heavy rebar.**
- **Expect more chain stretch when making nose buried cuts for extended periods of time, as the chain does not have a chance to "throw" the slurry away from the nose of the bar.**
- **If the saw begins to cut consistently crooked, turn the bar over and use the other side. Dress worn rails with belt sander. NOTE: The normal life of a guidebar is two to three diamond chains. Heavy rebar can shorten guidebar life.**
- **Remove bar and chain. Flush out the chain tensioner and side cover with water. Lubricate tensioner with grease.**
- **After cleaning the saw, spray the entire saw body, chain, bar, and drive sprocket with lightweight oil. Using silicone spray or WD40 on the saw will minimize rust and help reduce slurry build up.**

SYSTEM CLEAN-UP

- **After cutting, run the saw for at least 15 seconds with the water on to flush slurry and debris from chain, bar and drive sprocket.**
- **Wash concrete slurry from saw assembly.**
- **Avoid getting any water in the carburetor or exhaust system. If water enters exhaust port, point the bar tip down and pull the starter handle several times to expel water from muffler.**

MAINTENANCE

Follow these simple maintenance guidelines and your saw will continue running at its very best.

AFTER EACH USE

1. **Rinse the saw, guidebar and diamond chain with water.**
2. **Inspect and tighten all fasteners as necessary.**
3. **Inspect, flush and grease the chain tensioner.**
4. **Inspect drive sprocket for wear. Replace if tooth tips are pointed, or if groove cuts through top of tooth.**
5. **Check clutch cup needle bearing for wear. Ensure clutch cup spins freely and without excessive play.**
6. **Check starter cord for wear or damage. Replace as necessary.**
7. **Inspect air filter. Replace filter if dirty.**
8. **Spray saw, guidebar, and chain with silicone or WD40.**
9. **Spray silicone or WD40 into the air intake slots on the starter housing to keep starter pawls from sticking.**

AFTER 10 HOURS OF USE

1. **Remove the starter cover and clean the flywheel fins and the starter pawls with a wire brush, and then grease the starter pawls.**
2. **Remove the spark plug and clean with a wire brush. Check the electrode gap. The correct gap is 0.020 inches (0.5 mm).**
3. **Grease the clutch cup needle bearing.**

AFTER 40 HOURS OF USE

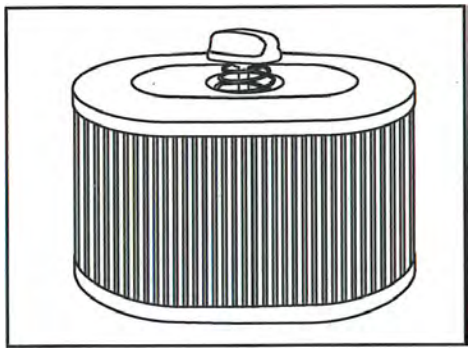
1. **Change the spark plug. Adjust the electrode to 0.020 inches (05. mm).**
2. **Check the fuel filter located inside the fuel tank. Clean or replace if clogged.**

AIR FILTER

IMPORTANT

The polyester air filter must be kept clean for the engine to operate properly. If the saw is not reaching full RPM, most likely the air filter is dirty.

- **The air filter should be free of holes and white in color.**
- **Replace air filter when dirty.**
- **When replacing the air filter, clean the area inside the air intake housing with a clean rag prior to installing new filter.**

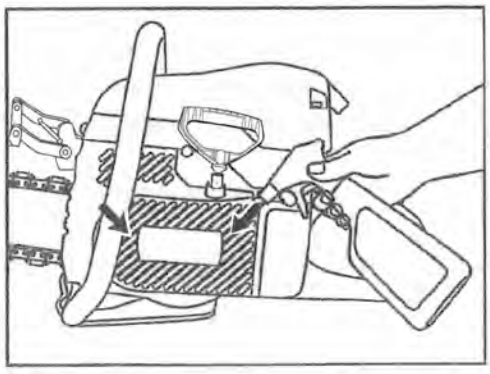


STARTER HOUSING ASSEMBLY

IMPORTANT

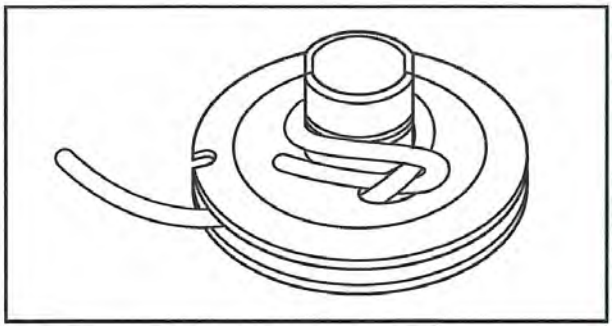
It is common for concrete slurry to get inside the starter housing assembly during cutting. This can cause the starter pawls to stick and not engage when the rope is pulled.

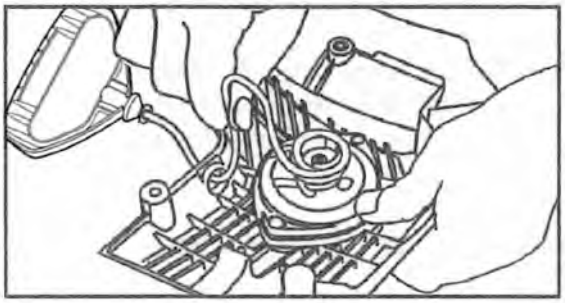
- **After each usage, thoroughly flush the starter housing assembly with water.**
- **Oil the starter pawls by spraying silicone or WD40 into the starter housing through the vents.**
- **Check the starter cord for fraying, replace if necessary.**



STARTER ROPE REPLACEMENT

- **Loosen the four screws that attach the starter cover assembly to the crankcase, and remove the starter cover assembly from the saw.**
- **Pull cord out from pulley approximately 12 inches (30 cm) and hook rope into the notch in the pulley. Relax the recoil spring by placing thumb on the pulley and gently allow the pulley to rotate backwards to unwind the spring entirely.**
- **Remove the old starter rope through the hole in the starter housing and then through the hole in the pulley.**
- **Wrap the starter rope around the raised center of the pulley, looping over top and under the beginning of the wrap. Tighten the knot firmly and ensure that free end of rope is as short as possible. Secure the other end of the rope in the starter handle.**





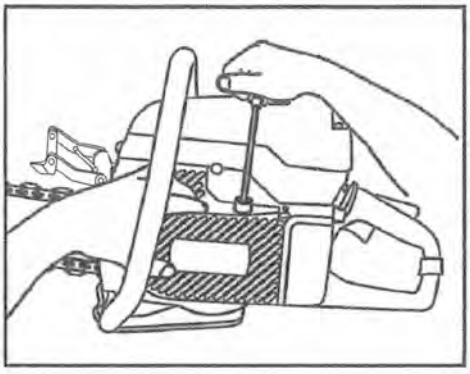
TENSIONING THE RECOIL SPRING

- **Hook the rope in the notch of the pulley and wind the rope clockwise three times around the raised center of the pulley.**
- **Pull the starter rope with the handle until the rope is unwound, tensioning the spring. Repeat this process, but this time wind the rope clockwise four times around and then pull the rope with the handle to complete the tensioning of the spring.**

NOTE: When released, the starter handle should be drawn to the correct start position after tensioning the spring.
CAUTION: Check that the pulley can be turned an additional ½ turn when the starter cord is pulled all the way out.

STARTER HOUSING ASSEMBLY

- **To reattach the starter cover assembly, first pull the starter cord out, and then hold the starter housing against the crankcase. Slowly release the starter cord to enable the pulley to fit between the pawls.**
- **Insert and tighten screws. Use Red Loctite® #268.**



CHAIN TENSIONER

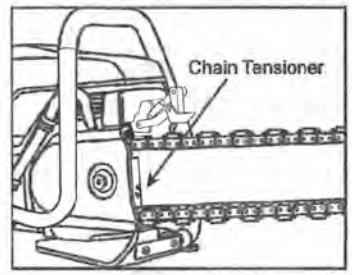
IMPORTANT

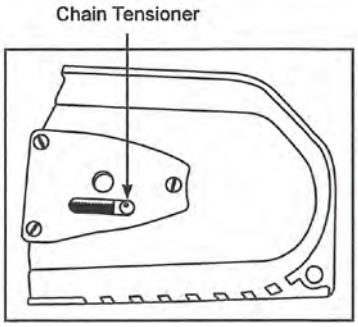
The chain tensioner can become clogged with concrete slurry during cutting. After each use thoroughly flush the chain tensioner with water and apply a liberal amount of grease.

NOTE: The chain tensioner is located on side cover, to the outside of the guidebar.

Most common causes of tensioner damage:

- **Side cover nut is not tight enough. Side cover nut should be torqued to 20-25 ft-lbs (27-33 Nm).**
- **Chain tensioning is attempted without loosening the side cover nut.**
- **Concrete debris in tensioner pocket.**





DRIVE SPROCKET

IMPORTANT

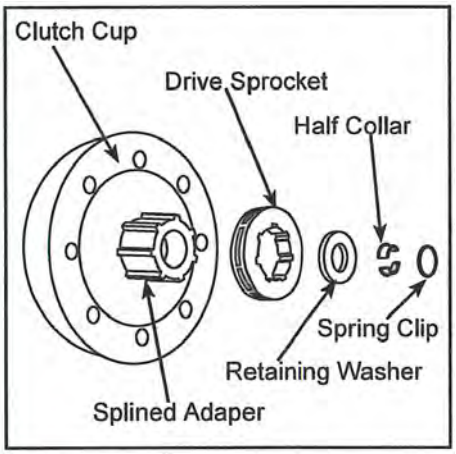
The drive sprocket (rim sprocket) is a wear item and should be replaced after two to three diamond chains have been used, or when drive teeth become pointed.

IMPORTANT

The needle bearing inside the splined adapter should be greased regularly and should be replaced with each new clutch cup.

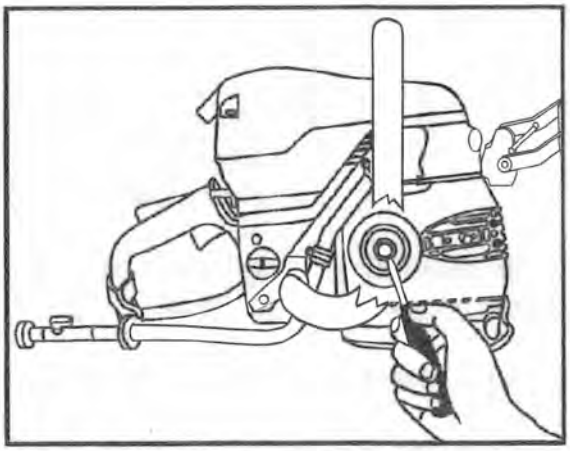
A drive sprocket system consists of a clutch cup w/ splined adapter and a drive sprocket. When the drive sprocket wears out, it is the only part that needs to be replaced. The clutch cup with splined adapter is a wear item that needs replacement after 3 to 5 drive sprockets have been used.

- **Inspect the drive sprocket for wear. Replace the drive sprocket if the drive teeth become pointed.**
- **Check the needle bearing inside the splined adapter by spinning the clutch cup. Ensure clutch cup spins freely and without excessive play.**
- **The needle bearing must be greased regularly, use high quality water-resistant bearing grease.**



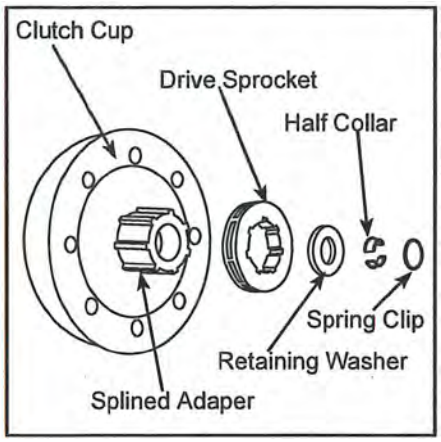
DRIVE SPROCKET REMOVAL

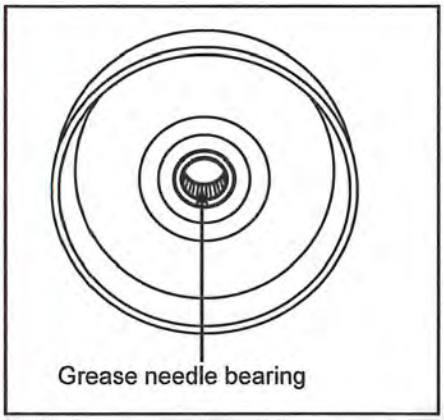
- **Remove the side cover, guidebar and diamond chain.**
  CAUTION: Wear safety glasses.
- **Using a screwdriver, carefully pry the spring clip from the half collars.**
  TIP: Cup your hand over the end of the shaft to prevent the spring clip from being ejected.
- **Remove the half collars and retaining washer from the shaft.**
- **Slide the drive sprocket off of the splined adapter.**



DRIVE SPROCKET INSTALLATION

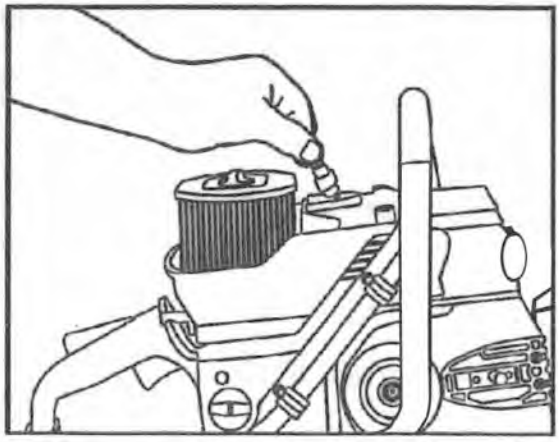
- **Prior to installing a new drive sprocket, slide the clutch cup off of the shaft and apply high quality water-resistant grease to the needle bearing.**
- **Reengage the clutch cup onto the shaft and slide the drive sprocket onto the splined adapter, either side out.**
- **Install the retaining washer and half collars onto the shaft.**
- **Place the spring clip atop the half collars, ensuring the half collars are symmetrical with equal gap on either side.**
- **Engage the spring clip onto the half collars by firmly pressing down with a screwdriver over the top of one of the gaps. TIP: Hold your thumb on the spring clip over the opposite side gap to maintain placement.**
- **Once the spring clip is partially engaged on one side, perform the same technique to the other side, again pressing firmly over the top of the gap.**
- **Check proper spring clip engagement by carefully prying out on the half collars. Both half collars should be firmly secured to the shaft.**





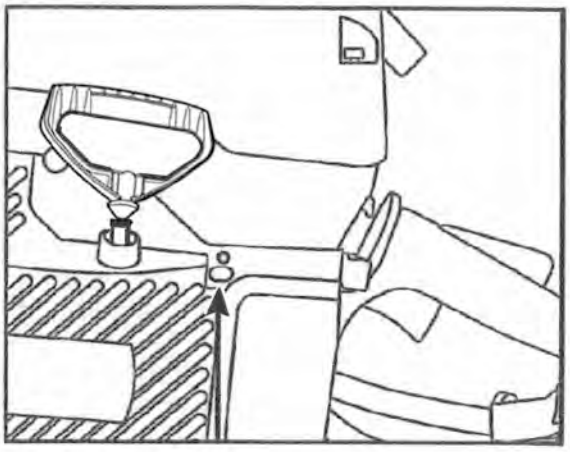
SPARK PLUG

- **A worn or fouled spark plug can cause a loss of power, difficulty starting or rough idle.**
- **If the spark plug is dirty, clean it with a wire brush and check the electrode gap. Readjust if necessary. The correct gap is .020 inches (0.5 mm).**
- **The spark plug should be replaced after 40 hours of operation or earlier if the electrode is badly corroded.**
- **Always use the recommended spark plug type. Using the wrong spark plug can severely damage the piston and cylinder (NGK #BPMR7A).**



CARBURETOR

- **The function of the carburetor is to mix fuel with air. Adjustments other than idle speed should only be made by a servicing dealer.**
- **Before adjusting the engine idle speed, make sure the air filter is clean and the engine is warmed up.**
- **Idle screw is adjusted so that the engine idles smoothly but the clutch does not engage.**
- **If saw has been running satisfactorily and there is a gradual decrease in power and drop in RPM at full throttle, the filter may have become dirty or saturated with water.**



GUIDEBARS

- **The bar is designed to be used on both sides. If the cut is consistently leading to one side, turn the bar over to expose a new set of rails.**
- **A table mounted belt or disc sander can be used to square the rails of a worn bar. A badly worn bar can quickly damage an expensive chain. If the chain is touching the bottom of the bar groove, replace the bar.**
- **Check the guidebar for straightness.**
- **Proper chain tension will extend bar life. See page 7.**
- **Under some circumstances, especially low water pressure, the sprocket nose can wear out before the guidebar body. Sprocket nose replacement kits may be purchased from an Authorized Dealer.**
- **Spray the chain and bar with silicone or WD40 for storage.**
- **Store bar with the sprocket nose up.**
- **Periodically clean the water ports inside the groove of the bar using a small diameter piece of wire.**
- **The bar is solely a guide track for the chain. Never use the bar to lift, twist or pry concrete material.**

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE
SAW WON'T REACH FULL RPM	Dirty air filter
SLOW DIAMOND CHAIN SPEED	Chain tension too tight. Diamond chain should always be able to be pulled around the guidebar by hand. It is normal for the diamond chain links to hang below the guidebars.
POOR CUTTING SPEED	Diamonds may be glazed over. Make a few cuts in an abrasive material to expose the diamonds.
PREMATURE CHAIN STRETCH	Not enough water pressure. The minimum water pressure required is 50 psi (3.5 bar). Insufficient water supply may result in excessive wear to the diamond chain, which can lead to loss of strength and diamond chain breakage.
CHAIN TENSIONER BREAKAGE	Side cover nut is not tight enough. Torque to 20-25 ft-lbs (27-33Nm).
WATER NOT FLOWING	Water hose is kinked or water supply not turned on.
	Water ports plugged with debris.
WON'T START	Aged or bad fuel.
	Defective spark plug.
DIFFICULT TO START	Flooded engine. Push choke in, hold throttle on full with foot and pull starter cord (hard, short, fast pulls) until engine starts.
	Fouled spark plug. Remove spark plug, clean, and re-gap to .020 in (0.5 mm).
DIAMOND CHAIN BREAKAGE	Improper chain tension.
	Inserting saw into slot narrower than diamond chain segments.
	Not enough feed pressure while cutting. Avoid letting the saw bounce and chatter.

Further questions?
Call 1-800-433-3716 or visit our website at cuttersedge.com

REFERENCE

APPROXIMATE CUTTING RATES

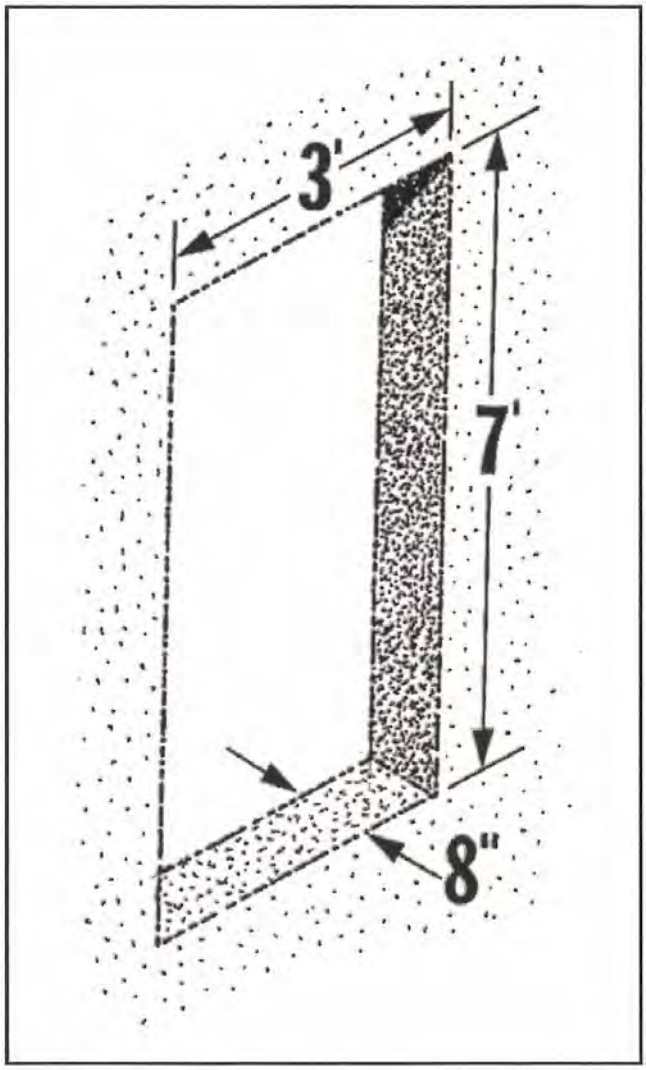
MATERIAL	CUTTING RATE
Hard aggregate & steel	15-25 sq-in/min (90-160 sq-cm/min)
Medium aggregates	20-30 sq-in/min (160-190 sq-cm/min)
Masonry, soft aggregate	30-50 sq-in/min (190-320 sq-cm/min)

INCH-FOOT DEFINITION

An in-ft is a measure of how much material is to be cut.
An in-ft is defined as: depth in inches times length in feet.
Note: 129 in-ft = 1m^2

Example: How many in-ft are in this doorway?

1. **Determine the depth of the cut in inches.**
   For this example, 8 inches.
2. **Determine the length of the cut in feet.**
   3 + 7 + 3 + 7 = 20 feet
3. **Multiply the two numbers.**
   8 in x 20 ft = 160 in-ft



CUTTERS EDGE
TWO-YEAR LIMITED WARRANTY

Effective **4 April 2011**

As Limited Below, Edge Industries, Inc., warrants to the purchaser that this Cutters Edge Saw is free from defects in materials and workmanship and agree to repair and/or replace defective saw parts or components free of charge as follows:

1. **Saws used for fire department, public safety or security applications**
   A) *Parts*
   At no cost to the purchaser, Edge Industries, Inc. will replace defective parts supplied or manufactured by Edge Industries, Inc. for two years from date of original purchase.
   B) *Labor*
   For thirty days from the date of original purchase, an authorized Edge Industries, Inc. dealer will provide labor at no charge to the original retail purchaser for the replacement of any covered defective part supplied or manufactured by Edge Industries, Inc.

2. **Saws used for commercial purposes (used to derive income)**
   A) *Parts other than electronic ignition parts*
   At no cost to the purchaser, Edge Industries, Inc. will replace defective parts, **other than electronic ignition parts**, for thirty days from the date of original purchase.
   B) *Electronic ignition parts*
   At no cost to the purchaser, Edge Industries, Inc. will replace defective **electronic ignition parts** for six months from the date of original purchase.
   C) *Labor*
   For thirty days from the date of original purchase, an authorized Edge Industries, Inc. dealer will provide labor at no charge to the original retail purchaser for the replacement of any covered defective part supplied or manufactured by Edge Industries, Inc.

3. *Grantor of Warranty:*
   Edge Industries, Inc.
   3855 23rd St.
   Baker City, OR 97814
   USA 541-524-9999

4. *Limitations on Warranty:*
   This warranty is not transferable, does not cover damage caused by unreasonable use or damage resulting from other than defects in material or workmanship, does not cover damages contributed to by a failure to provide reasonable and necessary maintenance, does not cover engine failure due to lack of or improper lubrication. Tune-ups or replacement of non-defective parts-such as mounts, starter springs, ropes, spark plugs, and filters-that may be expected to wear out with reasonable use during the warranty period are not covered. This warranty applies only to saws sold through dealers appointed by Edge Industries, Inc.

   THE WARRANTOR WILL BE LIABLE FOR NO INCIDENTAL OR CONSEQUENTIAL DAMAGES. THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH ABOVE. ANY WARRANTY IMPLIED BY STATE LAW-WHETHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE SHALL BE EFFECTIVE ONLY FOR THE DURATION OF THE APPLICABLE WARRANTY PERIOD LISTED ABOVE. Some states do not allow exclusions of incidental or consequential damages and/or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

5. *Responsibilities of me purchaser under this Warranty.,*
   A. To deliver or ship the saw covered under this Warranty to the dealer from whom it was originally purchased or to an Edge Industries, Inc., authorized service center. Time limits on warranties are measured to the date of delivery or shipment.
   S. Freight costs, if any, will be borne by the purchaser.
   C. To provide reasonable care and maintenance of the Edge Industries, Inc., product.

6. *Timely repair of warranted product:*
   Any product which qualifies under this Warranty shall be repaired in a timely manner, consistent with the normal work flow at the servicing location and depending on the availability of replacement parts.

7. *Purchaser rights and remedies:*
   This Warranty gives you specific legal rights. You may also have other rights which vary from state to state. It you do not receive satisfactory results from authorized servicing dealers you may contact Edge Industries, Inc., Customer Relations Department, PO Box 846, Baker City, OR USA 97814.