

CHICAGO
Electric® Power Tools

14" ELECTRIC CHAINSAW

Model 67255

SET UP AND OPERATING INSTRUCTIONS



Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

Revised Manual 10h

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SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if

not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

Chain Saw Safety Warnings



WARNING Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

1. **Double Insulated Chain Saws**
 - a. Replacement Parts - When servicing use only identical replacements parts.
 - b. Polarized Plugs - To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
2. **Keep Work Area Clean.**
 - a. Cluttered areas invite injuries.
 - b. Do not start cutting until you have a clear work area, secure footing, and a planned retreat path from the falling tree.

3. **Consider Work Area Environment.**

- a. Use extreme caution when cutting small size brush and saplings because the slender material may catch the saw chain and be whipped toward you or pull you off balance.
- b. Do not operate a chain saw in a tree unless specifically trained to do so.
- c. When cutting a limb that is under tension be alert for spring back so that you will not be struck when the tension in the wood fibers is released.
- d. Do not expose chain saw to rain.
- e. Do not use chain saw in damp or wet locations.
- f. Do not use chain saw in presence of flammable liquids or gases.

4. **Guard Against Electric Shock.**

Prevent body contact with grounded surfaces. For example: metal pipes, wire fences.

5. **Keep Children Away.**

- a. Do not let visitors contact chain saw or extension cord.
- b. All visitors should be kept away from work area.

6. **Store Idle Chain Saw.**

- a. When not in use, chain saws should be stored in a dry, and high or locked-up place – out of the reach of children.
- b. When storing saw, use a scabbard or carrying case.

7. **Don't Force Chain Saw**

It will do the job better and safer at the rate for which it was intended.

8. **Use Right Tool.**

- a. Cut wood only.
- b. Don't use chain saw for purpose not intended – for example – Don't use chain saw for cutting plastic, masonry, non-wood building materials.

9. **Dress properly.**

- a. Do not wear loose clothing or jewelry. They can get caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors.
- b. Wear protective hair covering to contain long hair.

10. **Use ANSI-approved Safety Glasses.**

Also use safety footwear; snug fitting clothing; protective gloves; steel-toed boots; hearing and head protection.

11. **Carrying Saw.**

Carry the chain saw by the front handle with the saw stopped, finger off the switch, the guide bar and saw chain to the rear.

12. **Maintain Chain Saw With Care.**

- a. Inspect chain saw cords periodically and if damaged, have repaired by authorized service facility.
- b. Keep cord clear of the chain and operator at all times. Never carry saw by the cord or pull it to disconnect from receptacle. Keep cord from oil and sharp edges.
- c. Inspect extension cords periodically and replace if damaged.
- d. Keep tools sharp and clean for better and safer performance.
- e. Follow instructions for lubricating and changing accessories.

- f. Keep handles dry, clean, and free from oil and grease.
13. **Disconnect Chain Saw.**
Disconnect chain saw when not in use, before servicing, and when changing accessories and attachments, such as saw chain and guard.
14. **Stay Alert.**
- a. Watch what you are doing. Use common sense. Do not operate chain saw when you are tired.
 - b. Keep all parts of the body away from the saw chain when the motor is operating.
 - c. Before you start the saw, make sure the saw chain is not contacting anything.
15. **Check Damaged Parts.**
- a. Before further use of the chain saw, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual.
 - b. Have defective switches replaced by authorized service center.
 - c. Do not use chain saw if switch does not turn it off.
 - d. Do not operate a chain saw that is damaged, improperly adjusted, or is not completely and securely assembled. Be sure that the saw chain stops moving when the trigger is released.
16. **Guard Against Kickback.**
WARNING: KICKBACK may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut. Tip contact in some cases may cause a lightning fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the saw which could result in serious injury to user.
The following precautions should be followed to minimize kickback:
- a. Grip Saw firmly.
Hold the chain saw firmly with both hands when the motor is running. Use a firm grip with thumbs and fingers encircling the chain saw handles.
 - b. Do not over reach.
 - c. Keep proper footing and balance at all times.
 - d. Don't let the nose of the guide bar contact a log, branch, ground or other obstruction.
 - e. Don't cut above shoulder height.
 - f. Use devices such as low kickback chain, guide bar nose guards and special guide bars that reduce the risks associated with kickback.
17. **Power Supply**
Connect chain saw to correct voltage. Be sure that the voltage supplied is

the same as that specified on the nameplate of the tool.

18. **DANGER!** People with pacemakers should not use chain saws. Chain saws produce strong electromagnetic fields that can cause pacemaker interference or pacemaker failure. People with pacemakers should consult their physician(s) for advice.
19. ***Do not touch guide bar tip to any object. Tip contact may cause guide bar to move suddenly upward and backwards.***
20. ***Use only identical Oregon® Chain and Bar replacement components.***
21. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
22. Avoid unintentional starting. Prepare to begin work before turning on the tool.
23. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
24. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
25. This product is not a toy. Keep it out of reach of children.
26. **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to

cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

27. **WARNING:** Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)
28. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To

reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



SAVE THESE INSTRUCTIONS.

GROUNDING

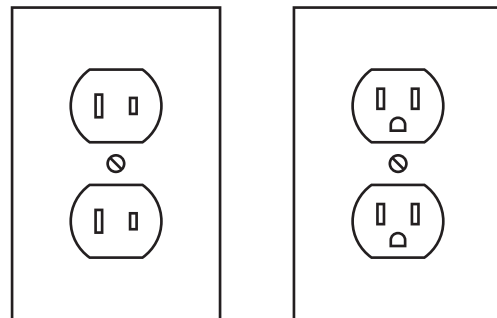
⚠️ WARNING TO PREVENT ELECTRIC SHOCK



AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

Double Insulated Tools: Tools with Two Prong Plugs



Outlets for 2-Prong Plug

1. Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the

National Electrical Code. **(See Outlets for 2-Prong Plug.)**

2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Outlets for 2-Prong Plug.)**

Extension Cords






1. ***Grounded*** tools require a three wire extension cord. ***Double Insulated*** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Table A.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.

7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.
9. Use extension cords with at least a gauge wire as large as indicated in **Table A** for 7.1 to 12.0 Amperes.
10. Keep the cord away from the cutting area. Position the cord so that it will not be caught on branches, and the like, during cutting.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)					
NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25'	50'	75'	100'	150'
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

TABLE A * Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

Symbology

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
	Volts Alternating Current
	Amperes
n_0 xxxx/min.	No Load Revolutions per Minute (RPM)

SPECIFICATIONS

Electrical Input	120 V~ / 60 Hz / 9 A (Rated)	
Motor Speed	5,600 RPM (No Load)	
Chain Oil	Type	Chain/Bar/Sprocket Oil
	Capacity	6 oz (175 ml)
Cutting Attachment	14" Oregon® Bar: Model # 140SDEA041 Sprocket nose and Oregon® Chain: Model #91PJ052X Anti-Kickback full skip chain Pitch: 3/8" Gauge: 0.050" # of links: 52	

Note: This electric chain saw is for cutting small logs and for lighter weight trimming jobs. A more powerful chain saw may be needed for heavy duty use.

UNPACKING

When unpacking, make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353 as soon as possible.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

CHAIN SAW FEATURES

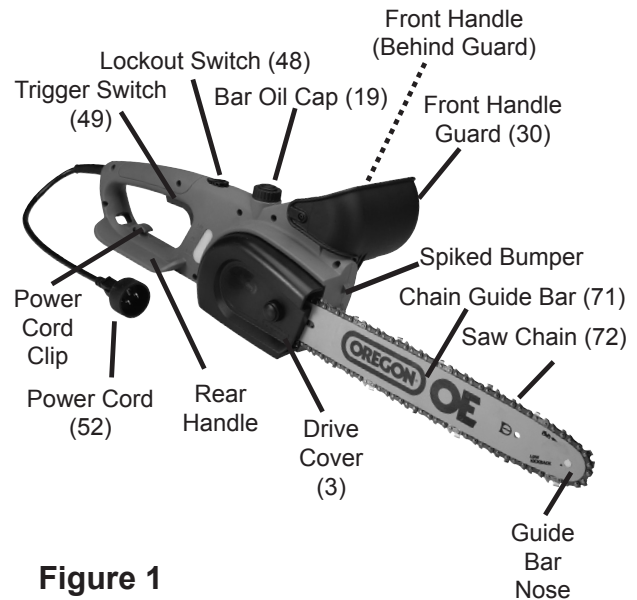


Figure 1

1. Bucking - The process of cross cutting a felled tree or log into lengths.
2. Drive Sprocket or Sprocket - The Toothed part that drives the Saw Chain.
3. Felling - The process of cutting down a tree.
4. Felling Back Cut - The final cut in a tree felling operation made on the opposite side of the tree from the notching undercut.
5. Front Handle - The support handle located at or toward the front of the Chain Saw.

WARNING: To avoid possible serious injury when the Chain Saw is running, ALWAYS maintain a firm grip with one hand on the Front Handle and the other hand on the Rear Handle.

6. Front Handle Guard - A guard that protects your hand on the Front Handle from the Saw Chain.
7. Chain Guide Bar - A solid railed structure that supports and guides the Saw Chain.
8. Kickback - The backward or upward motion, or both of the Guide Bar, occurring when the Saw Chain near the nose of the top area of the Guide Bar contacts any object such as a log or branch, or when the wood closes in and pinches the Saw Chain in the cut.
9. Kickback, Pinch - The rapid pushback of the saw which can occur when the wood closes in and pinches the moving saw chain in the cut along the top of the Guide Bar.
10. Kickback, Rotational - The rapid upward and backward motion of the saw which can occur when the moving Saw Chain near the upper portion of the nose of the Guide Bar contacts an object, such as a log or branch.
11. Low-Kickback Chain - A Chain that complies with the kickback performance requirements of ANSI B175.1-1991 when tested on a representative sample of chain saws.
12. Lockout Switch - A movable stop that prevents the unintentional operation of the Trigger Switch until manually activated.
13. Normal Cutting Position - Those positions assumed in performing the bucking and felling cuts.
14. Notching Undercut - A notch cut in a tree that directs the tree's fall.
15. Oiler Control - a System for oiling the Guide Bar and Saw Chain.
16. Rear Handle - The support handle located at or toward the rear of the saw.
17. Reduced Kickback Guide Bar - A Guide Bar which has been demonstrated to reduce kickback significantly.
18. Replacement Saw Chain - A chain that complies with the kickback performance requirements of ANSI B175.1-1991 when tested with specific chain Saws. It may not meet the ANSI performance requirements when used with other saws.
19. Saw Chain - A loop of chain having cutting teeth, that cut the wood, and that is driven by the motor and is supported by the Guide Bar.
20. Spiked Bumper (Spike) - The pointed tooth or teeth for use when felling or bucking to pivot the saw and maintain position while sawing.
21. Trigger Switch - A device that when operated will complete or interrupt an electrical power circuit to the motor of the Chain Saw.

OPERATING INSTRUCTIONS



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Saw Chain Tension

WARNING TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before adjusting tool or installing accessories.

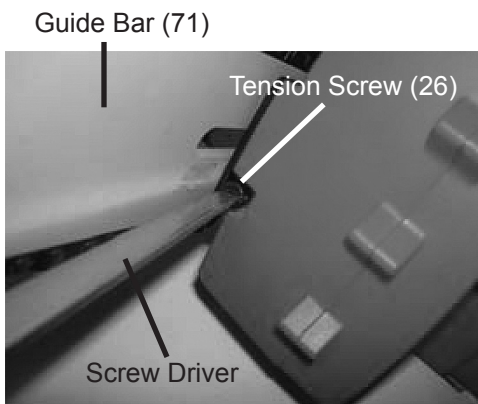


Figure 2

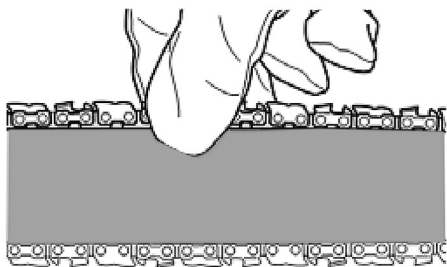


Figure 3

The Chain Saw is fully assembled, but may require a minor adjustment of the Saw Chain tension. Before using, check the Saw Chain tension.

Note: New Saw Chains often need to be tensioned several times during first use. Check a new Saw Chain's tension often when first using.

While wearing heavy duty gloves, use your index finger and thumb to carefully grab the Saw Chain in the middle section under the Guide Bar. Pull the Saw Chain away from the Guide Bar. The Saw Chain should snap back against the Guide Bar. The Chain should fit snugly in the groove of the Chain Guide Bar, yet you should still be able to slide the chain along the Chain Guide Bar by hand. There should be no sagging between the Guide Bar and Saw Chain on the *underside* of the Guide Bar.

If the Saw Chain needs adjustment:

1. Loosen the Nut (2) on the on the Drive Cover (3).
2. Pull up on the Guide Bar Nose and hold it up while making the tension adjustment.
3. Turn the Chain Tension Screw (26) *clockwise*, until the Saw Chain makes contact along the bottom of the Chain Guide Bar. Turn the Tension Screw 1/4 turn more.
4. Continue to hold the Guide Bar Nose up while tightening the Nut.

After this adjustment is made, check the Saw Chain tension again by pulling the Saw Chain away from the top of the Guide Bar, then making sure that it can slide along the Guide Bar. Also, test the tension by pulling the Saw Chain away from the bottom of the Guide Bar, then letting it go. The Saw Chain should snap back into place in the groove of the Guide

Bar. If needed, repeat the above adjusting steps to achieve the correct tension.

Work Piece and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the extension cord along a safe route to reach the work area without creating a tripping hazard or exposing the extension cord to possible damage. The extension cord must reach the work area with enough extra length to allow free movement while working.
3. Secure the extension cord by snapping it in the Power Cord Clip so there will be no tension on the connection between the Power Cord (52) and the extension cord.
4. There must not be objects, such as utility lines, gas or water pipes nearby that will present a hazard while working.

General Operating Instructions

1. Before cutting, remove the Oil Fill Cap. Inspect the Cap Gasket (21) for damage. Fill the oil reservoir to just below fill plug with Bar and Chain oil (not included). Then replace the Oil Fill Cap.
2. Stand in front of the wood to be cut with your feet firmly in place.
3. Connect the outdoor rated extension cord (not included) to the Power Cord (52) of the Chain Saw. Make sure

the electrical cord is away from the cutting area.

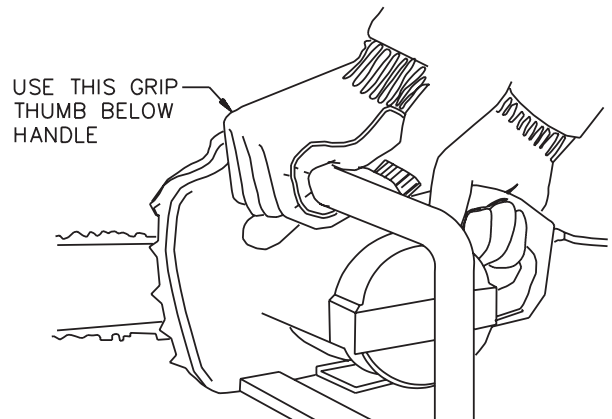


Figure 4

Note: Front Handle Guard not shown in illustration

4. Grasp the Handles with both hands. Always grip the handle with the thumb and fingers encircling the handle as show above.
5. Push forward on the Lock-out Switch (48), then squeeze and hold the Trigger Switch (49). **NOTE:** The Trigger Switch cannot be activated unless the Lock-out Switch is depressed. With the Chain Saw running, you may release pressure on the Lock-out Switch. Releasing the Trigger Switch will stop the motor.

DANGER! To prevent serious injury and death from kickback: Do not touch the Guide Bar Nose to the wood.

6. When the Chain Saw reaches full speed, begin cutting with a light, downward pressure against the bottom mid-section of the Saw Chain (72). Allow the Saw Chain to cut at its own rate. Applying too much pressure can damage the tool.

DANGER! When cutting loose, round, wood stock, make sure to place the wood stock on a sawhorse, in a cradle or use a timberjack (all sold

separately) to avoid grabbing and throw back.

7. When the Saw is cooled completely, cover the Chain Guide Bar (71) with the Guide Bar Sheath (73).
8. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.

Basic Felling, Limbing, and Bucking Cut Techniques

Felling

1. When *felling* a tree, make sure the tree is not felled in a manner that would endanger any person, strike any utility line, or cause any property damage. Before felling is started, consider the natural lean of the tree, the location of larger branches, and the wind direction, to judge which way the tree will fall. The Chain Saw operator should keep on the uphill side of the terrain, as the tree will likely roll or slide downhill after it is felled.

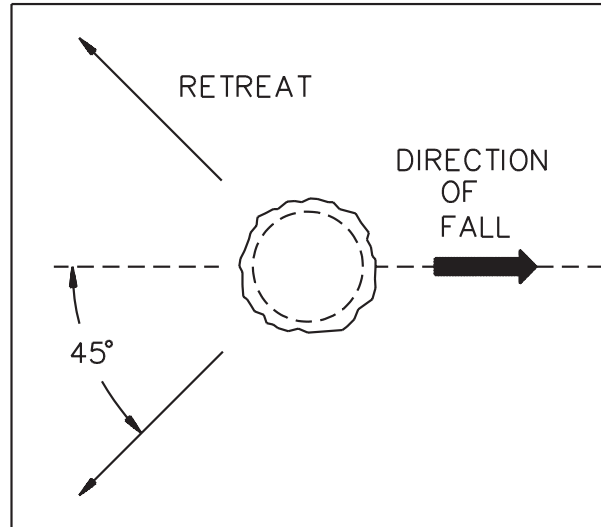


Figure 5

2. A retreat path should be planned and cleared as necessary before cuts are started. The retreat path should extend back and diagonally to the rear of the expected line of fall.
3. Remove dirt, stones, loose bark, nails, staples, wire, and other foreign objects from the tree where the cuts are to be made.

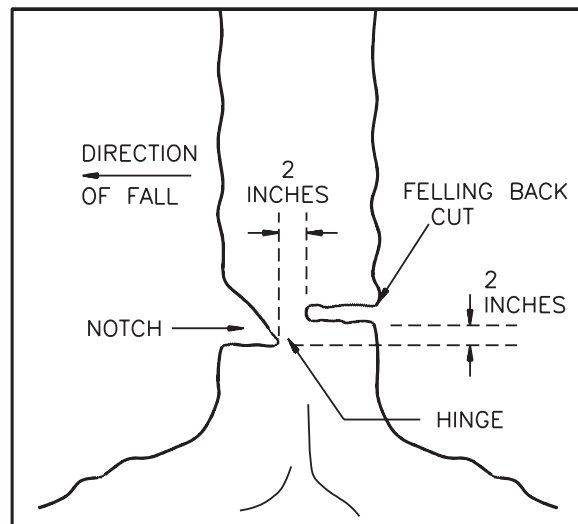


Figure 6

4. When making a notching undercut, make the notch 1/3 the diameter of the tree, perpendicular to the

direction of the fall. Make the lower horizontal notching cut first. This will help to avoid pinching of either the Saw Chain or the Chain Guide Bar when the second notch is being made.

5. When making a *felling back cut*, make the felling back cut at least 2 inches higher than the horizontal notching cut. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so that enough wood is left to act as a hinge. The hinge wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.
6. As the felling cut gets close to the hinge the tree should begin to fall. If there is any chance that the tree may not fall in the desired direction, or it may rock back and bind the Saw Chain (72), stop cutting before the felling back cut is complete and use wedges of wood, plastic, or aluminum to open the cut and drop the tree along the desired line of fall.
7. When the tree begins to fall, remove the Chain Saw from the cut. Turn off the Chain Saw and put it down. Then, use the retreat path planned. Be alert for overhead limbs falling, and watch your footing.

Limbing

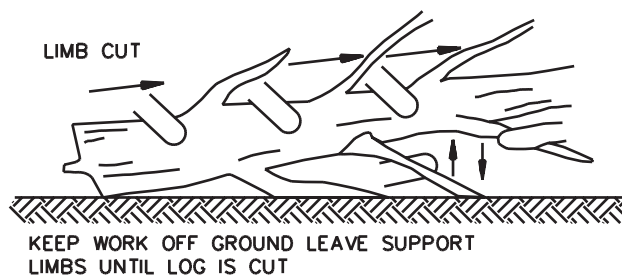


Figure 7

8. When limbing (trimming) branches from a fallen tree, leave the larger, lower limbs to support the log off the ground. Remove the small limbs in one cut. Branches under tension should be cut from the bottom up to avoid binding the Saw Chain.

Bucking

9. *Bucking* a log is cutting a log into lengths. It is important to make sure your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs, chocks or a timberjack.

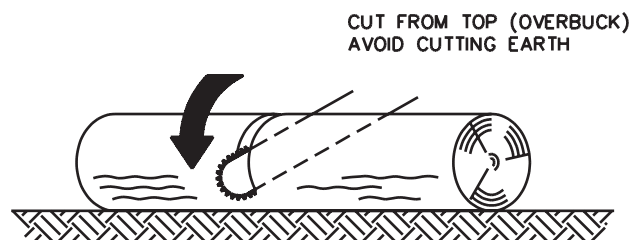
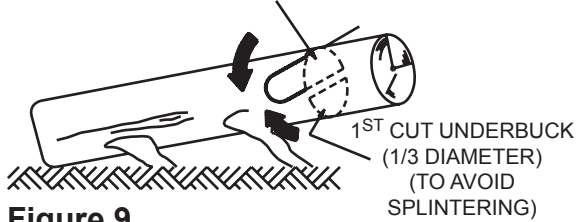


Figure 8

10. To *Overbuck* is when the log is supported along its entire length and is cut from the top. Allow the Saw to pull forward into the top of the log until the Spiked Bumper contacts on the log. Then pivot the saw through the log.

2ND CUT OVERBUCK (2/3 DIAMETER)
TO MEET 1ST CUT (TO AVOID PINCHING)



11. **Figure 9**

To Underbuck is when the log is supported on one end, and a cut 1/3 the diameter of the log is made from the underside of the log. Then, the finished cut is made by overbucking to meet the first cut.

1ST CUT OVERBUCK (1/3 DIAMETER)
(TO AVOID SPLINTERING)

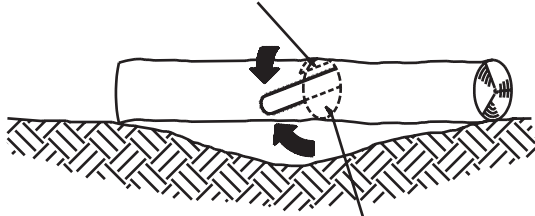


Figure 10

12. When the log is supported on both ends, cut 1/3 of the log's diameter from the top overbuck. Then, make the finished cut by underbucking the lower 2/3 diameter of the log to meet the first cut.



13. **Figure 11**

When *bucking* on a slope, always stand on the *uphill* side of the log. When "cutting through", to maintain complete control release the cutting pressure near the end of the cut without relaxing your grip on the Chain Saw Handles. Do not allow the Saw Chain (72) to contact the ground. After completing the cut, wait for the Saw Chain to stop before moving the Chain Saw. Always turn off the Chain Saw before moving from tree to tree.

MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

WARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- BEFORE EACH USE**, inspect the general condition of the tool. Check for loose hardware, misalignment or binding of moving parts, cracked or broken parts, dull or damaged Saw Chain, damaged electrical wiring, and any other condition that may affect its safe operation.
- BEFORE THE FIRST USE**, make sure the Oil Tank (18) is filled with Bar and Chain oil (not included). Oil is automatically applied to the Saw Chain when the Oil Reservoir is full.
- IF THE SAW CHAIN (72) BECOMES LOOSE**, adjust the Saw Chain tension as described under Tool Setup.
- WHEN NECESSARY**, have the Saw Chain (72) sharpened by a qualified technician, following the manufacturer's instructions.
- PERIODICALLY**, turn the Chain Guide Bar (71) over to distribute the wear on it. Replace the Chain Guide Bar when bent, cracked, or when the Saw Chain (72) moves excessively from side to side on the Chain Guide Bar.
- AFTER USE**, wipe the outside surface of the Chain Saw with a clean, dry cloth. If necessary use a mild detergent. Do not use solvents. Do not immerse this tool in liquid.

Guide Bar Care

Remove the Guide Bar after use to clean and grease.

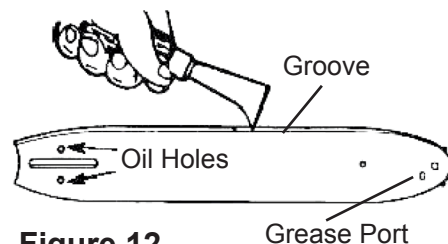


Figure 12

Remove sawdust and sap from the Bar Groove using a Guide Bar Cleaning tool (sold separately), then lubricate the nose sprocket at the ports with motor oil or bar oil.

Reverse the Guide Bar when replacing the Saw Chain to prevent uneven wear.

The flanges of the Guide Bar groove should always be parallel to each other. To check the Guide Bar:

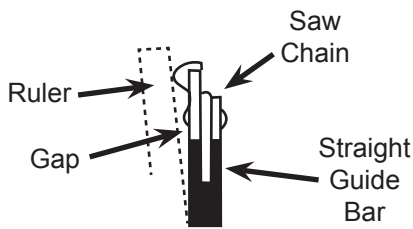


Figure 13 - Normal Guide Bar

Place a ruler along the surface of the Guide Bar and Saw Chain. If there is a gap, the bar is normal.

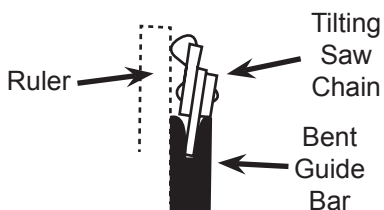


Figure 14 - Bent Guide Bar

If the ruler is flush with the Guide Bar and Saw Chain, or the Chain tilts to one side, then the Bar is bent and needs to be repaired or replaced.

Sharpening the Saw Chain

For smooth and safe operation, always keep the Saw Chain cutters sharp.

The cutters need to be sharpened when:

- a. The sawdust becomes powder-like.
- b. You can't make the cut without extra force.
- c. The Chain Saw does not cut straight.
- d. Vibration increases.

Warning: Be sure to wear safety gloves when handling the Saw Chain.

Follow the Saw Chain manufacturer's instructions for sharpening the Saw Chain.

Replacing the Saw Chain

WARNING! Do not attempt to install a Saw Chain or Chain Guide Bar other than the size and type provided and listed in the Specifications Chart on page 10.

1. Soak the new Saw Chain overnight in Chain/Bar/Sprocket oil (sold separately).
2. Loosen the Nut (2) on the Drive Cover (3), then loosen the Chain Tension Screw counter clockwise until the Saw Chain is loose.
3. Unthread the Nut (2) and remove the Drive Cover (3).
4. Push the Guide Bar towards the Sprocket to further loosen the Saw Chain.
5. Remove the Saw Chain (72) from the Sprocket then the Guide Bar (71).

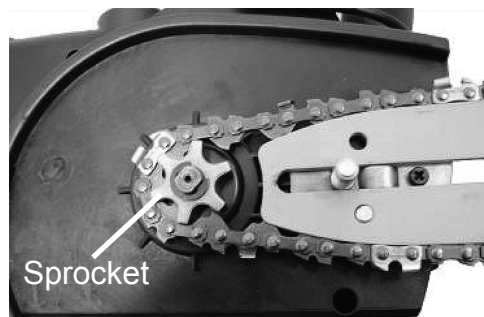


Figure 15

Note: Always check the condition of the Sprocket (6) when replacing the chain. The Sprocket should be replaced if it shows signs of wear or is damaged. If needed, have the Sprocket replaced and the bearings greased by a qualified technician.

6. Flip the Chain Guide Bar over before mounting the new saw Chain. This will ensure that the Chain Guide Bar wears evenly over time.

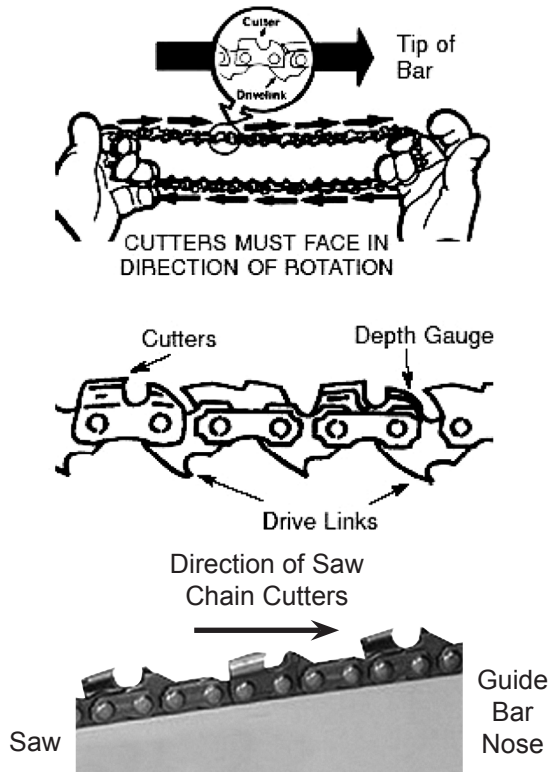


Figure 16

7. Place the new Saw Chain around the Sprocket and over the Guide Bar. Make sure the Cutters of the Saw Chain are facing away from the Chain Saw along the top edge of the Guide Bar. Fit the Chain in the groove around the Guide Bar.
8. Replace the Drive Cover (3).

Note: The tab on the Driver Cover (3) must slide into a slot on the Right Housing (29) and the lock-pin to be locked into the housing prior to securing the nut. Do not force.

9. Finger tighten the Nut, then tension the Saw Chain following the steps in

the Saw Chain Tension section, on page 12.

⚠WARNING! If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

Cleaning, Maintenance, and Lubrication Schedule

Note: This maintenance schedule is intended solely as a general guide. If performance decreases or if equipment operates unusually, check systems immediately. The maintenance needs of each piece of equipment will differ depending on factors such as duty cycle, temperature, air quality, and other factors. If you have doubts about your ability to safely service this tool, have a qualified technician service the equipment instead.

Note: These procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the engine and equipment.

Weekly Maintenance:

- a. Clean Guide Bar and turn over.
- b. Deburr Guide Bar following manufacturer's instructions.
- c. Check Chain Sprocket for wear or damage.

Monthly Maintenance:

Clean Chain Oil Tank.

If Damaged:

- a. Replace Guide Bar if it becomes bent or damaged.
- b. Sharpen or replace Saw Chain.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none"> 1. Cord not connected. 2. No power at outlet. 3. Tool's thermal reset breaker tripped (if equipped). 4. Internal damage or wear. (Carbon brushes or switch, for example.) 	<ol style="list-style-type: none"> 1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads. 3. Turn off tool and allow to cool completely. Restart motor. 4. Have technician service tool.
Tool operates slowly.	Power being reduced by long or small diameter extension cord.	Use an extension cord with the proper wire gauge for its length and load. See <i>Extension Cords</i> in <i>GROUNDING</i> section (page 8).
Performance decreases over time.	<ol style="list-style-type: none"> 1. Accessory dull or damaged. 2. Carbon brushes worn or damaged. 	<ol style="list-style-type: none"> 1. Keep cutting accessories sharp. Replace as needed. 2. Have qualified technician replace brushes.
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes or bearings, for example.)	Have a technician service the tool.
Overheating.	<ol style="list-style-type: none"> 1. Forcing tool to work too fast. 2. Accessory dull or damaged. 3. Blocked motor housing vents. 4. Motor being strained by long or small diameter extension cord. 	<ol style="list-style-type: none"> 1. Allow tool to work at its own pace. 2. Keep cutting accessories sharp. Replace as needed. 3. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. 4. Use an extension cord with the proper wire gauge for its length and load. See <i>Extension Cords</i> in <i>GROUNDING</i> section (page 8).



Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

PLEASE READ THE FOLLOWING CAREFULLY

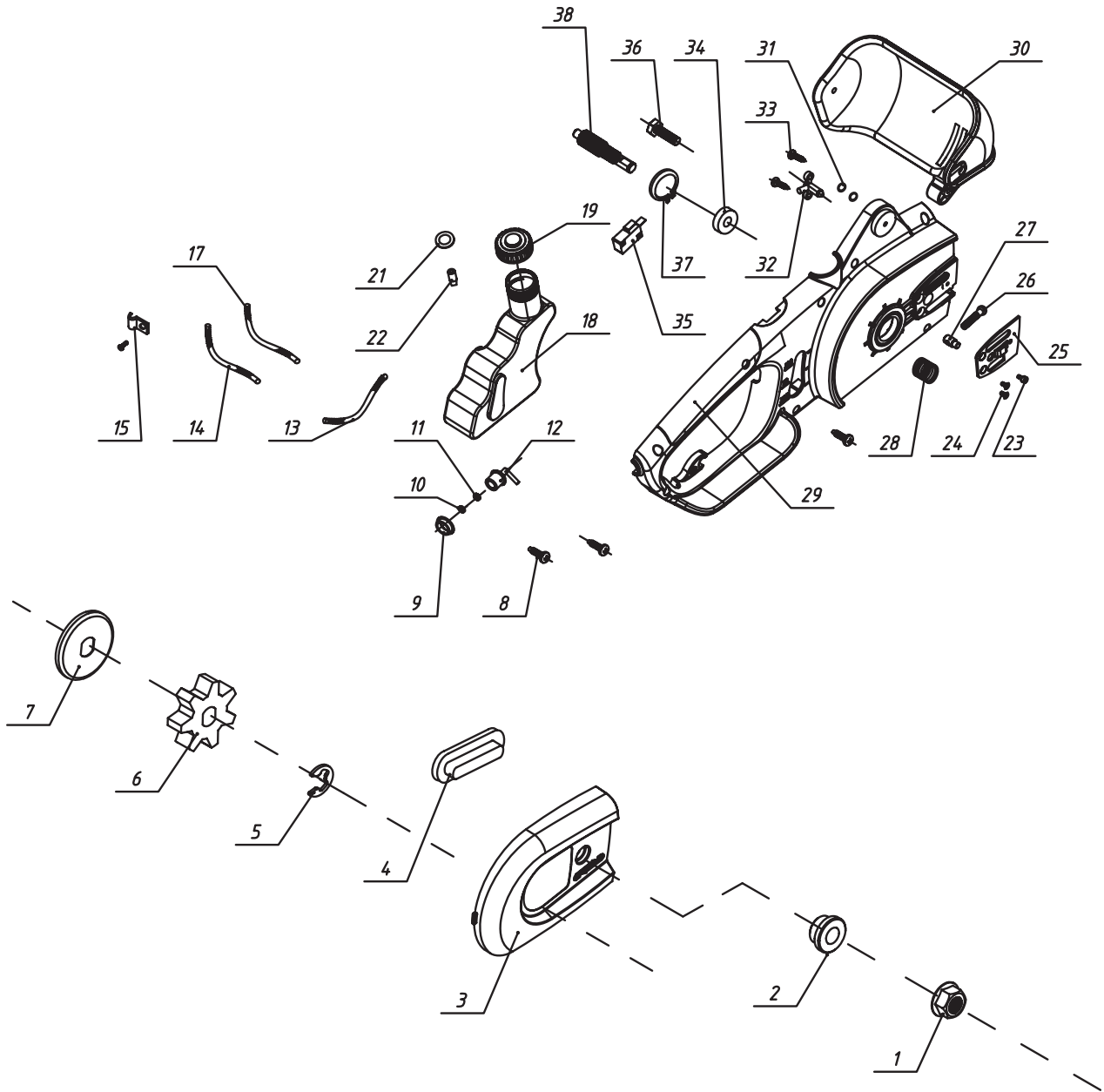
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PARTS LIST

Part	Description	Qty
1	Nut Cover	1
2	Nut M8	1
3	Drive Cover	1
4	Seal Ring	1
5	Retaining Ring Ø 7	1
6	Sprocket	1
7	Seal Cover	1
8	Screw M4 x 16 (on page 17 & 18)	23
9	Rubber Sleeve	1
10	Connecting Plug	1
11	Sponge	1
12	Oil Outlet Connection	1
13	Oil Outlet Tube	1
14	Oil Inlet Tube	1
15	Oil Tube Plate	1
16	Screw M3 x 12	1
17	Oil Outlet Tube	1
18	Oil Tank	1
19	Bar Oil Cap	1

Part	Description	Qty
21	Cap Gasket	1
22	Valve	1
23	Screw	1
24	Sunk Screw M4 x 10	2
25	Insulation Blanket	1
26	Tension Screw	1
27	Tightening Nut	1
28	Spring	1
29	Right Housing	1
30	Front Handle Guard	1
31	Rubber Ring	2
32	Oil Outlet Connection	1
33	Screw M4 x 10	1
34	Bearing	1
35	Micro Switch	1
36	Bolt M8	1
37	Circlip Ø 16	1
38	Output Shaft	1

ASSEMBLY DIAGRAM

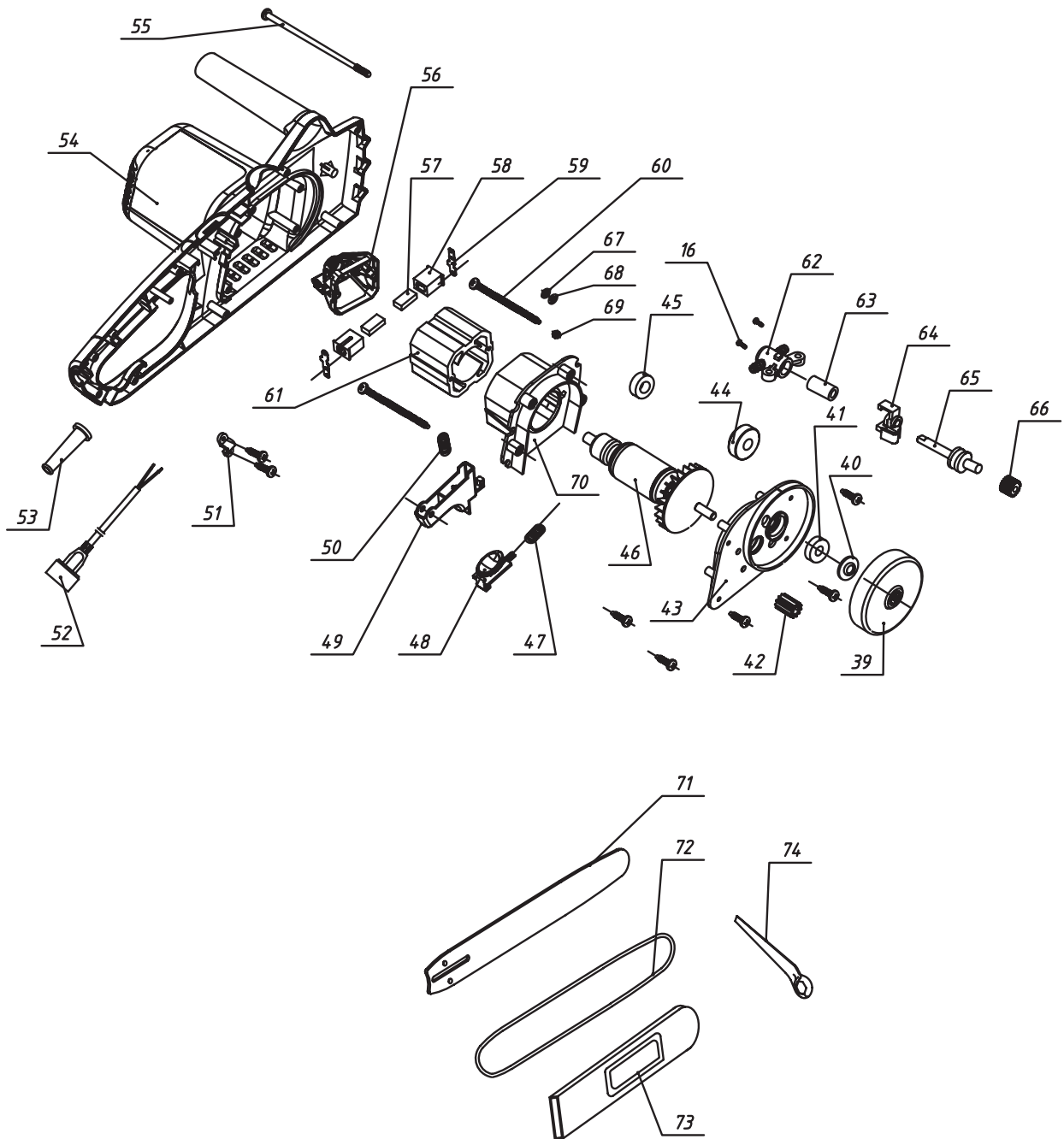


PARTS LIST

Part	Description	Qty
39	Gear	1
40	Trim Plate	1
41	Bearing	1
42	Motor Gear	1
43	Backup Plate	1
44	Front Bearing	1
45	Rear Bearing	1
46	Rotor	1
47	Spring	1
48	Lock-out Switch	1
49	Trigger Switch	1
50	Trigger Spring	1
51	Cable Sheath	1
52	Power Cord	1
53	Cable Plate	1
54	Left Housing	1
55	Screw	1
56	Motor Rear Holder	1
57	Carbon Brush	2

Part	Description	Qty
58	Brush Holder	2
59	Plate	2
60	Screw	2
61	Stator	1
62	Pump	1
63	Oil Plug Cover	1
64	Piston Support	1
65	Worm Gear Shaft	1
66	Worm Gear	1
67	Spring Washer Ø 4	2
68	Washer Ø 4	2
69	Nut M4	2
70	Stator Fixing Board	1
71	Chain Guide Bar	1
72	Saw Chain	1
73	Guide Bar Sheath	1
74	Wrench	1

ASSEMBLY DIAGRAM



Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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