



OPERATOR'S MANUAL

EHC-2000

Serial Number 001001 & Up

EHC-3000

Serial Number 001001 & Up

ELECTRIC HEDGECLIPPER

WARNING  **DANGER**

**READ INSTRUCTIONS CAREFULLY AND
FOLLOW RULES FOR SAFE OPERATION.
FAILURE TO DO SO COULD RESULT IN
SERIOUS INJURY.**

For your nearest ECHO Dealer, call 1-800-432-ECHO (3246)

SAFETY INSTRUCTIONS FOR ELECTRIC HEDGE CLIPPERS

WARNING DANGER

WHEN USING ELECTRIC HEDGE CLIPPERS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY.

✓ READ ALL OF THESE INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS HEDGE CLIPPER.

- **Double Insulated Hedge Clipper - Important!** - When servicing, always use authorized replacement parts only.
- **Equipment Polarized Plugs** - To reduce the risk of electrical shock, this equipment has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. This equipment plug will fit in a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized cord or contact the manufacturer to determine where a proper extension cord may be obtained. Do not change the equipment plug or extension cord receptacle in any way.
- **Extension Cord Polarized Plug** - Since a polarized extension cord must be employed, it will require the use of a polarized wall outlet. This plug will only fit into a polarized wall outlet one way. If the plug does not fit fully into the outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the plug in any way.
- **WARNING - To Reduce the Risk of Electric Shock** - Avoid a dangerous environment. Do not use hedge clippers in damp or wet locations, wet hedges or shrubbery. Do not use in the rain. Use only three wire extension cords marked "For Outdoor Use" such as SJW-A, SJOW-A, SJTW-A or SJTOW-A, etc. When using an extension cord be sure to use one heavy enough to carry the current your hedge clipper will draw. An undersized extension cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to use depending on length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number the heavier the cord. Do not use damaged extension cords. Inspect cords periodically and replace if damaged. If you are unable to find the proper extension cord it may be purchased from your nearest ECHO dealer.
To reduce the risk of disconnection of hedge clipper cord from extension cord during operation make a knot as shown on Page 8.

Recommended Minimum AWG Size for Extension Cords			
Total Length Cord in Feet			
25 feet 18 AWG	50 feet 16 AWG	100 feet 16 AWG	150 feet 14 AWG

- **Keep Children Away** - All visitors should be kept 15 feet (5 m) from the work area.
- **Dress Properly** - Do not wear loose clothing or jewelry. They can get caught in moving parts. Use of rubber gloves, non skid footwear is recommended when working outdoors. Wear protective covering for long hair.
- **Use Safety Goggles** - Always use face or dust mask if dusty.
- **Stay Alert** - Watch what you are doing - use common sense. Do not operate the hedge clipper when tired or fatigued.
- **Ground Fault Circuit Interrupter (GFCI)** - A GFCI should be provided on the circuits or outlets to be used with the hedge clipper. Receptacles are available with built-in GFCI protection and may be used for this measure of safety.
- **Use Hedge Clipper Properly** - Do not force hedge clipper - It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed. Use only for trimming the type of shrub, growth, and the like, described in this operating manual. Do not abuse the hedge clipper. Do not use for any job except that for which the hedge clipper was intended.
- **Avoid Unintentional Starting of Hedge Clipper** - Do not carry a plugged-in hedge clipper with the switch on. Before plugging in clipper, be sure switch is off.
- **Do Not Abuse Cord** - Never carry the hedge clipper by the cord or yank it to disconnect from receptacle. Keep cord away from heat, oil, and sharp edges.
- **DANGER - Risk of Cut - Keep Hands Away From Blades** - Keep both hands on the handles when the electrical power is on. Do not attempt to remove cut material or hold material to be cut when blades are moving. Make sure clipper switch is off when clearing jammed material from blades. Do not grasp the exposed cutting blades or cutting edges of hedge clipper.
Caution: Blades coast after clipper is turned off.
- **Do Not Overreach or Stand On Unstable Support** - Maintain footing and balance at all times.
- **Disconnect (unplug) Hedge Clipper from Power Supply** - When not in use, before servicing, when changing accessories such as blades, and the like.

- **Store Idle Hedge Clipper Indoors** - When not in use, hedge clipper should be stored indoors in a dry place. Store clipper in locked-up place out of the reach of children.
- **Maintain Hedge Clipper With Care** - Keep cutting edges sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect hedge clipper cord periodically, and if damaged, have it repaired by an Authorized ECHO Service Dealer. Keep handles dry, clean, and free from grease.
- **Do Not Attempt to Repair Hedge Clipper** - Have repairs made by an Authorized ECHO Service Dealer.
- **Check Damaged Parts** - Before further use of the hedge clipper, 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 part, breakage of parts, mounting, and other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an Authorized ECHO Service Dealer.
- **Warning** - The use of any other accessory or attachment other than recommended in this operator's manual may present a risk of personal injury.

SAVE THESE INSTRUCTIONS

INTRODUCTION

This ECHO Electric Hedge Clipper is a lightweight high-performance unit designed for professional use. If you are a home owner/occasional user, other units may be available which are more suited to your use.

- Read and understand the entire Operator's Manual before using this machine.
- Locate the safety decals on your hedge clipper. Make sure the decals are legible and that you understand and follow it. See "DESCRIPTION" for location of the decals.


- Pay special attention to the "GRAPHIC WARNINGS" in this manual. Each highlights an important message that must be followed.
- If you need to obtain another copy of this manual, please write to, ECHO, INCORPORATED, 400 Oakwood Road, Lake Zurich, IL 60047

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Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

 This device accompanied by the words **WARNING** and **DANGER** calls attentions to an act or a condition which can lead to serious personal injury or death.

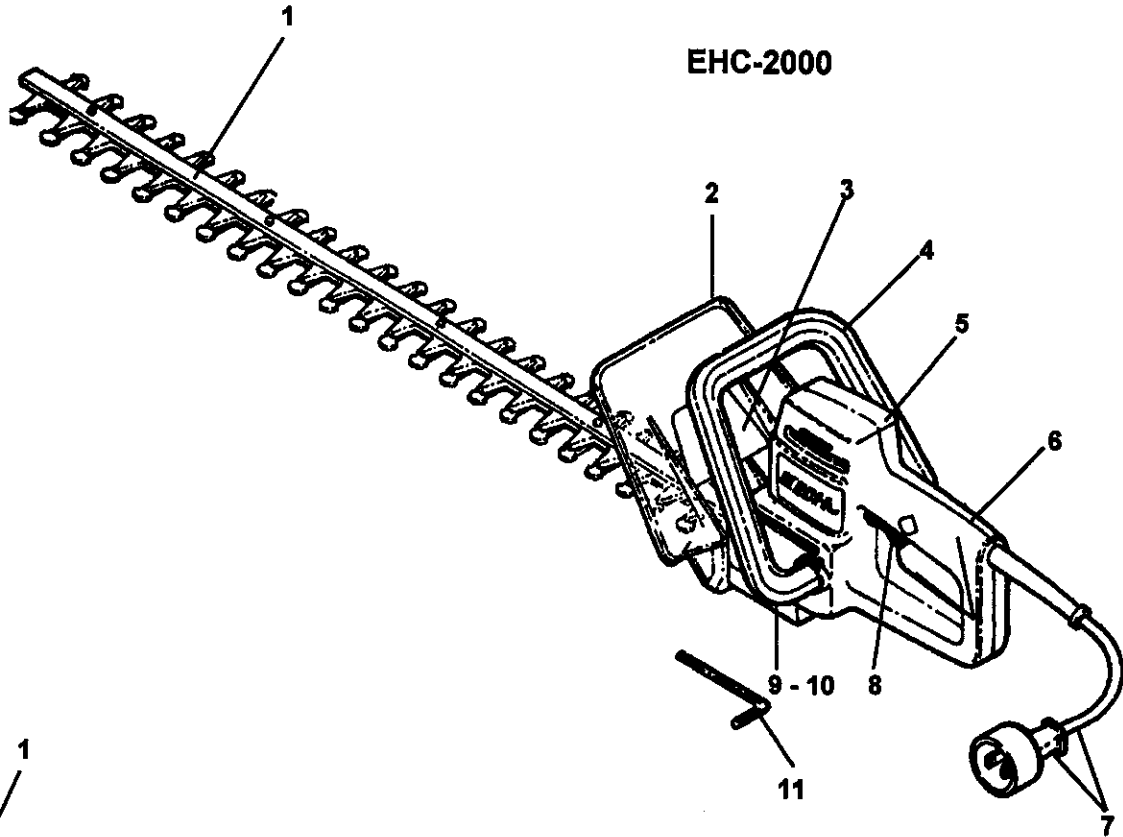
IMPORTANT
This enclosed message provides information necessary for the protection of the unit.

Circle and slash symbol means whatever is shown is prohibited. 

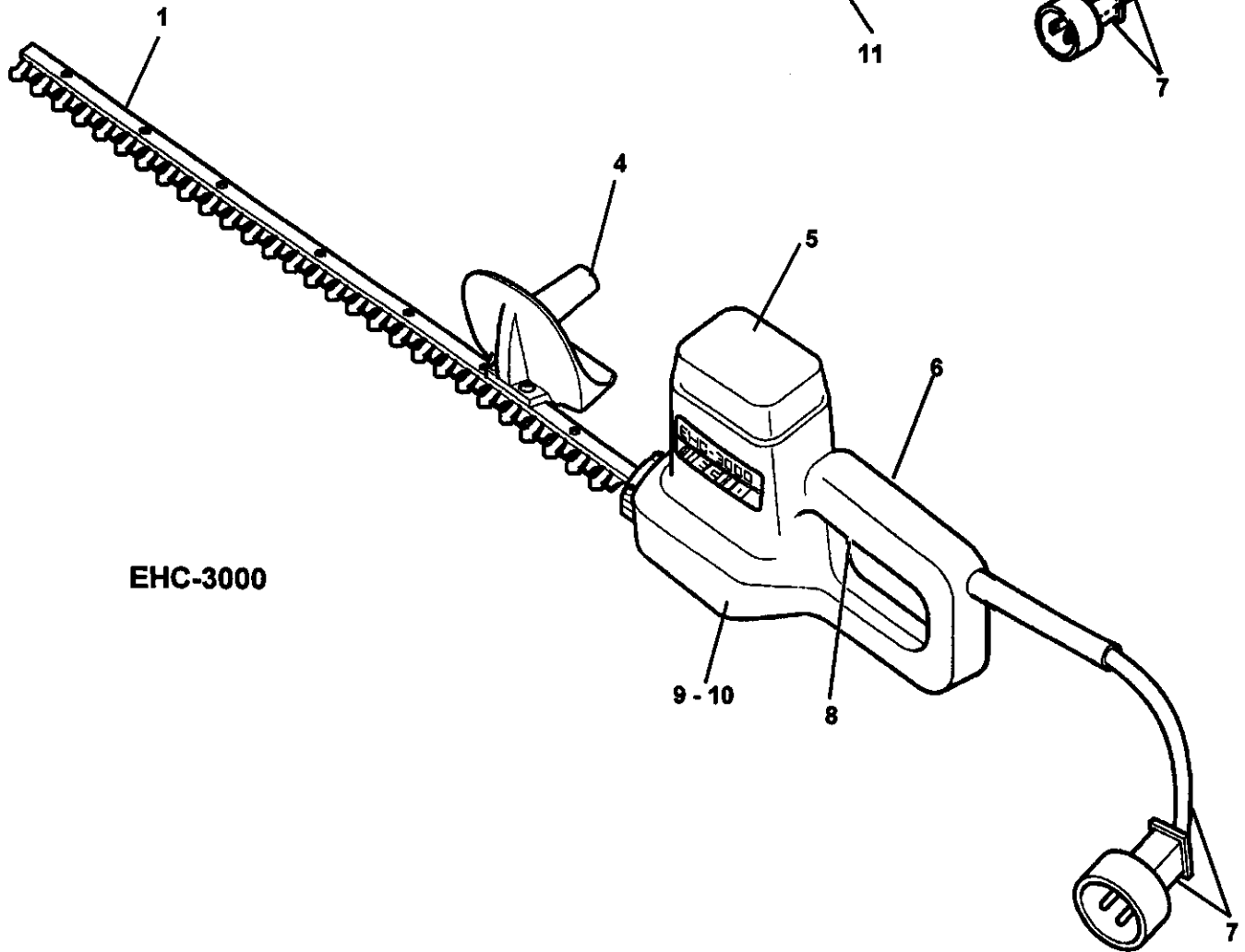
NOTE
This enclosed message provides tips for use, care and maintenance of the unit.

DESCRIPTION

EHC-2000



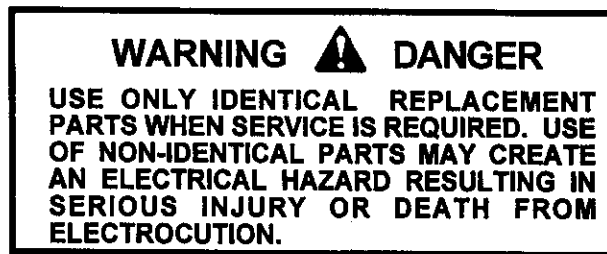
EHC-3000



DESCRIPTION

General Description - This is a "double insulated tool". This means either grounded or ungrounded power supplies can be used although ECHO recommends use of grounded systems. The power cord has two wires and the plug has two prongs. This system is recognized and approved by Underwriters Laboratories and OSHA.

1. **Blade Assembly** - Consists of the bottom, "shear plate", the center, "cutter blade", and the top "support bar".
2. **Front Hand Guard** - Protects operator from debris and helps keep hand from coming in contact with blade assembly.
3. **Safety Decal** - Read and follow these important safety precautions.
4. **Front Handle** - Used to support the unit during operation (right hand on EHC-3000) and also to transport the unit.
5. **Motor Housing** - Protective cover made of a dielectric material surrounding the motor. This material helps protect you in case of failure of the standard functional insulation within the electrical system. The housing must not be broken or cracked. Unit must not be used if housing is damaged.
6. **Rear Handle** - Used to support the unit during operation (left hand on EHC-3000). Contains the switch actuator (trigger).



7. **Power Cord** - Connects to an external power supply (requires 115V AC) to operate the unit.
8. **Switch Actuator (Trigger)** - Activated by the operator's index finger. Controls blade movement.
9. **Gear Housing Protector** - Helps prevent and guard against contact with metal gear housing.
10. **Gear Housing** - Under gear housing protector. Contains gears and lubricant.
11. **Wrench** - A 5mm hex wrench is supplied with each EHC-2000 hedge clipper. Store the wrench in the space provided under the rear handle.

DECALS

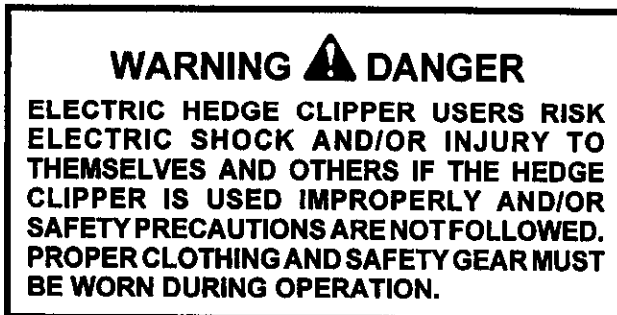
HAND GUARD SAFETY DECAL



HOUSING SAFETY DECAL



OPERATOR SAFETY



VIBRATION AND COLD

It is believed that a condition called Raynaud's Phenomenon, which affects the fingers of certain individuals may be brought about by exposure to vibration and cold. Exposure to vibration and cold may cause tingling and burning followed by loss of color and numbness in the fingers. The following precautions are strongly recommended because the minimum exposure which might trigger the ailment is unknown.

PHYSICAL CONDITION

- Your judgement and/or dexterity may be impaired if you are ill, are taking medication, and/or have taken alcohol or other substances known to affect the way you would normally function. Operate this unit only if you are in good physical and mental health.

HOT HUMID WEATHER

- Heavy protective clothing can increase operator fatigue which may lead to heat stroke. Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.

- Keep your body warm, especially the head, neck, feet, ankles, hands and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks and also by not smoking.
- Limit the number of hours of operation. Try to fill each day with jobs where operating the hedge clipper or other hand-held power equipment is not required.
- If you experience discomfort, redness and swelling of the fingers followed by whitening and loss of feeling, consult your physician before further exposing yourself to cold and vibration.

OPERATOR SAFETY

REPETITIVE STRESS INJURIES

It is believed that overusing the muscles and tendons of the fingers, hands, arms and shoulders may cause soreness, swelling, numbness, weakness and extreme pain to the areas just mentioned. Certain repetitive hand activities may put you at a high risk for developing a repetitive stress injury (RSI).

An extreme RSI condition is Carpal Tunnel Syndrome (CTS) which could occur when your wrist swells and squeezes a vital nerve that runs through the area. Some believe that prolonged exposure to vibration may repeatedly contribute to CTS. CTS can cause severe pain for months or even years.

- Avoid using your wrist in a bent, extended or twisted position.
- Take periodic breaks to minimize repetition and rest your hands.
- Reduce the speed and force in which you do the repetitive movement.
- Do exercises to strengthen hand and arm muscles.
- See a doctor if you feel tingling, numbness or pain in your fingers, hands, wrists or arms. The sooner RSI/CTS is diagnosed, the more likely permanent nerve and muscle damage can be prevented.

EYE PROTECTION

- Wear eye protection goggles that meet ANSI Z87.1 requirements. Goggles meeting the requirements have the mark "Z87" stamped on them.
- If operating conditions require additional protection, flip-down face shields conforming to ANSI Z87.1 are also available. Safety goggles must be worn even if a face shield is used.

WEAR PROPER CLOTHING

- Snug fitting, durable clothing should be worn. Pants should have long legs, **DO NOT WEAR SHORTS**. Do not wear loose fitting clothing, scarfs, neckties, jewelry or any item that may become tangled in surrounding growth or the hedge clipper itself.
- Wear shoes with non-skid soles. **DO NOT** wear open toed shoes or operate unit bare footed.
- Wear no-slip, heavy duty work gloves to improve your grip on the hedge clipper handles. Gloves also help reduce the transmission of machine vibration to your hands. Special vibration reducing gloves such as ECHO's PRO-COMFORT, are designed to provide additional comfort.

WARNING DANGER

THIS IS AN ELECTRIC POWERED HEDGE CLIPPER. ELECTRIC SHOCK CAN CAUSE SERIOUS PERSONAL INJURY OR DEATH! TO REDUCE THE RISK OF ELECTRIC SHOCK:

- **DO NOT** use the hedge clipper in the rain, in wet locations or on wet hedges or shrubbery.
- Use only extension cords of the correct size and marked "for use with outdoor appliances".
- **DO NOT** use damaged extension cords. Inspect before use.
- **DO NOT** abuse cord. Never carry hedge clipper by the cord.
- **DO NOT** pull on cord to disconnect from receptacle. **ALWAYS** grasp plug and pull firmly.
- Protect cord from heat, gasoline/oil and sharp edges. Replace any cord that is, or appears damaged.
- **DO NOT** touch the metal gear housing or cutter bar if the blade has cut into the extension cord.

WARNING DANGER

HEDGE CLIPPER BLADES ARE VERY SHARP. ACCIDENTAL CONTACT WITH MOVING OR STATIONARY BLADES CAN CAUSE SERIOUS PERSONAL INJURY. TO REDUCE THE DANGER FROM ACCIDENTAL CONTACT, OBSERVE THE FOLLOWING:

- Use a firm grip with the fingers and thumbs of both hands encircling the handles.
- **NEVER** operate hedge clipper with only one hand.
- **ALWAYS** stop the hedge clipper and disconnect from the power cord before removing a blade jam.
- **NEVER** have another person hold material you are cutting.
- **DO NOT** attempt to catch a falling hedge clipper, let the unit fall to the ground.
- Blades coast after switch is released. Wait until blade stops before setting hedge clipper down and unplug unit before touching blades.

DETERMINE WORK AREA

- Review the area to be trimmed. Look for hazards that may contribute to unsafe conditions, e.g. wire, metal objects, stones, power lines, fences hidden by growth, streams, ponds and any other obvious and hidden items that could tangle or jam the blade assembly.
- Plan your approach carefully. Several minutes taken planning will eliminate wasted time and will be safer.

PROTECTING OTHERS

- Spectators, co-workers, children and animals should be kept at least 15 ft. (5m) away from the hedge clipper when it is in use. Individuals working within the 15 ft. radius should wear the same protective equipment as recommended for the operator and be aware of the location of the hedge clipper at all times.

OPERATION

POWER REQUIREMENTS

Electricity - This hedge clipper requires a constant supply of 115V 60 Hz power and draws 3.0 AMPS (345 WATTS). Voltage should not vary more than 10%.

IMPORTANT

Variation of more than 10% will cause loss of power, motor overheating and possible motor damage.

OPERATE SAFELY AND AVOID DAMAGE TO CLIPPER

For additional information on safety refer to Operator Safety section (Page 6) of this manual.

- Keep both hands on handles when motor is running.
- If blade is jammed, strikes an object or does not operate properly, stop motor, disconnect cord and clear blades, inspect for damage and repair as required.
- Do not overreach or stand on unstable surfaces.
- When two or more clippers are operating at the same time be sure the 15 ft. (5m) safe distance is observed.

USING THE HEDGE CLIPPER

IMPORTANT

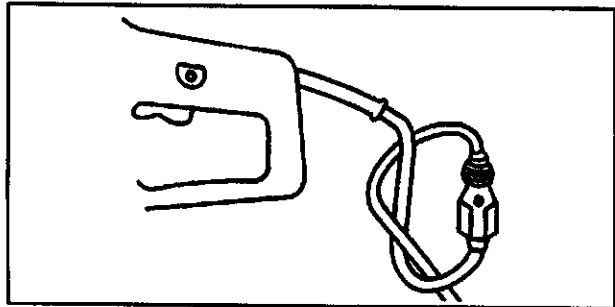
This unit is designed to cut shrubs and hedges with branches no larger than 1/4 inch diameter.

WARNING DANGER

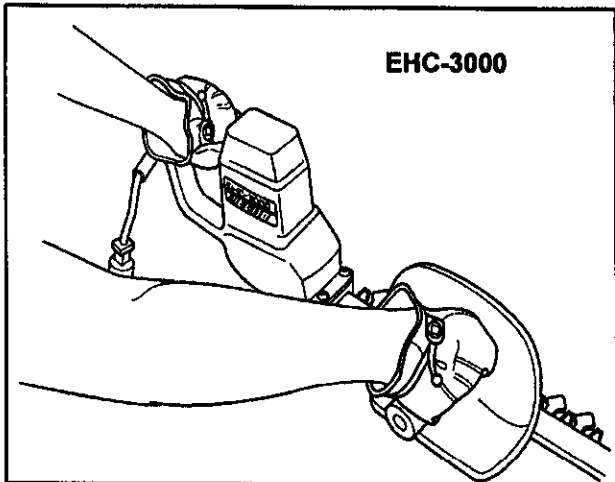
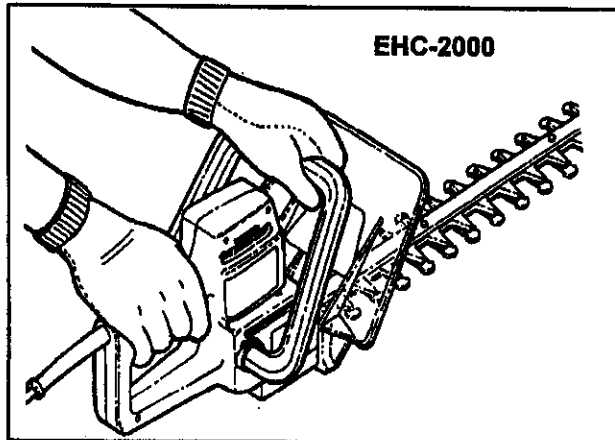
THIS IS AN ELECTRIC POWERED HEDGE CLIPPER. TO AVOID THE POSSIBILITY OF DANGEROUS ELECTRIC SHOCK OR ELECTROCUTION DO NOT USE THE HEDGE CLIPPER IN THE RAIN OR IF THE GROWTH TO BE CUT IS WET.

1. Plan your cut carefully. Always begin your cut as close to the power source as possible. Keep the extension cord behind you to avoid the possibility of dangerous electric shock or electrocution. Keep the cord away from the blade. Work away from the power source allowing the cord to follow behind you. This technique keeps the cord away from the area being trimmed.

2. To avoid accidental pull-out of plug from extension cord, simply tie a loose knot with the hedge clipper power cord and the extension cord. The loop in the knot will remove the likelihood of pulling out the plug from the extension cord.



3. Hold clipper firmly with fingers and thumb encircling handles, squeeze trigger and allow motor to come up to full operating speed before beginning cut.

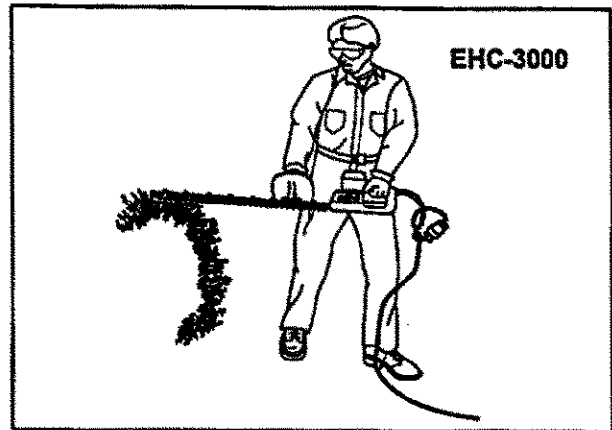
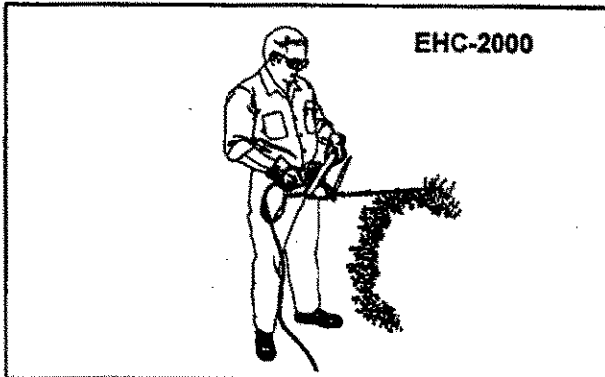


WARNING DANGER

NEVER DRAPE THE CORD OVER THE HEDGE/ BUSH BEING TRIMMED. DO NOT USE THE HEDGE CLIPPER WITHOUT GUARD AND FRONT HANDLE.

OPERATION

4. Cut in long sweeping arcs. Do not force the hedge clipper, let the machine do the work.



SERVICE MAINTENANCE GUIDE

AREA	MAINTENANCE	BEFORE USE	AFTER USE	OTHER
Entire Unit	Check for damage	•	•	
Brushes	Inspect/Replace			6 Mo.
Gear Housing	Lubrication (1)			6 Mo.
Blades	Lubrication (2)	•	•	
Blades	Sharpen	(As Required)		
Air Vents	Clean	•	•	

(1) Lubrication for gear housing is Lithium Base Grease (Molykote VN2461 C-O)

(2) Lubrication for the blade consists of 50/50 mixture of SAE30 Oil and Kerosene.

SERVICE

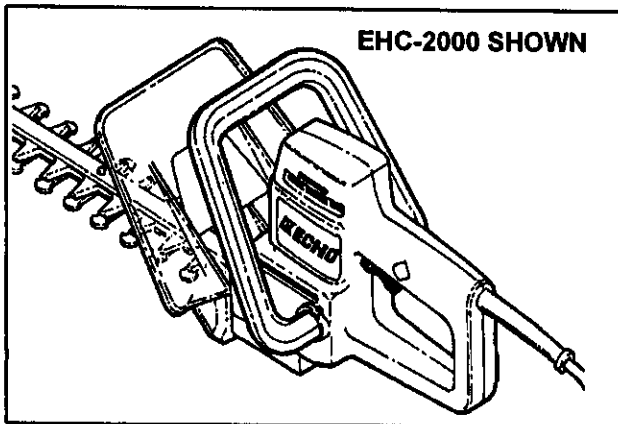
CHECK FOR DAMAGE

Inspect the entire hedge clipper and repair or replace any part that is broken, bent or loose.

WARNING **DANGER**

THE MOTOR HOUSING IS MOLDED DIELECTRIC MATERIAL THAT HELPS PROTECT THE OPERATOR FROM ELECTRIC SHOCK. BROKEN OR CRACKED HOUSINGS OR GUARDS MAY NOT PROTECT YOU. **DO NOT OPERATE TOOL IF HOUSINGS OR GUARDS ARE DAMAGED.**

USE ONLY IDENTICAL REPLACEMENT PARTS WHEN SERVICE IS REQUIRED. USE OF NON-IDENTICAL PARTS MAY CREATE AN ELECTRICAL HAZARD RESULTING IN SERIOUS INJURY OR DEATH FROM ELECTROCUTION.



COOLING SYSTEM

1. There are two air vents located on either side of the motor housing.
2. Clean debris from these before and after operation. Lack of cooling will result in motor overheating.

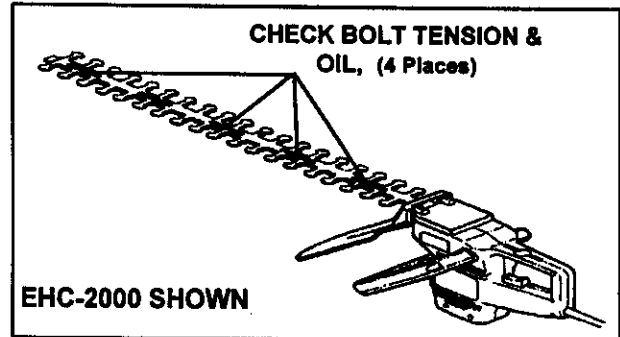
BLADE INSPECTION AND LUBRICATION

NOTE

Always wear gloves to help protect hands.

1. Clean entire blade assembly with a 50/50 mixture of SAE 30 oil and kerosene.
2. Inspect blade and shear plate for bends or cracks, both must be flat to ensure proper shearing action.

3. Check blade bolts for correct tension. Bolts must be tight enough to assure proper shearing action yet loose enough to allow easy sliding action of the blade against the shear plate.
4. Re-coat entire blade assembly with 50/50 mix and apply several drops of SAE 30 oil to each blade bolt.



WARNING **DANGER**

DISCONNECT THE HEDGE CLIPPER FROM THE ELECTRIC POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE.

BRUSH INSPECTION AND REPLACEMENT

It is recommended that brush inspection and replacement be performed by an Authorized ECHO Service Dealer.

SERVICE

GEAR HOUSING LUBRICATION

EHC-2000

- 1A. Use the 5mm hex wrench to remove the screws securing the front hand guard. Then remove the two Phillips head screws securing the front hand guard to the gear housing protector.

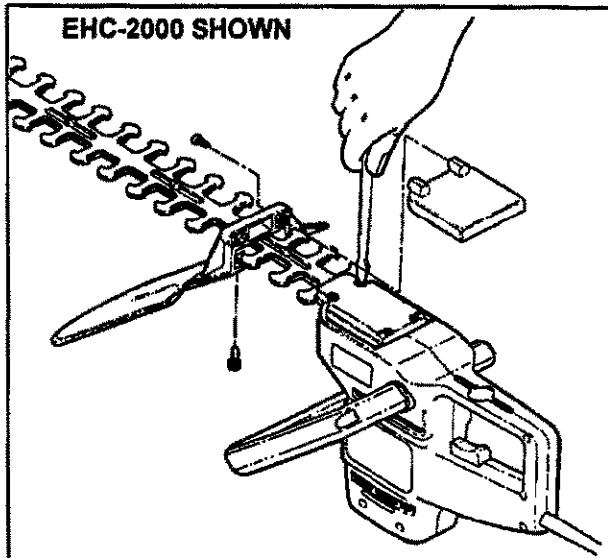
EHC-3000

- 1B. Use Phillips head screwdriver to remove the screws securing the gear box.
2. Use a flat screw driver to remove the four (4) screws securing the gear housing cover.
3. Inspect the inside of the housing and gears for damage and contamination from dirt and moisture.
4. Clean the old grease from the area and re-fill with new clean grease as specified on Page 9.

WARNING DANGER

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USE ONLY IDENTICAL REPLACEMENT PARTS WHEN SERVICE IS REQUIRED. USE OF NON-IDENTICAL PARTS MAY CREATE AN ELECTRICAL HAZARD RESULTING IN SERIOUS INJURY OR DEATH FROM ELECTROCUTION.



SPECIFICATIONS

	EHC-2000	EHC-3000
Rating	3.0 AMPS 115V 60 Hz	
Watts	345	
No Load Strokes/Min.	1,500	
Cutting Length	26"	30"
Diameter	1/4"	1/4"
Weight	8.2 lbs.	8.0 lbs.

PARTS CATALOG

To obtain a parts catalog send a check or money order for \$2.00 per parts book made payable to ECHO, INCORPORATED. Include a sheet of paper stating your name, address and specify

EHC-2000 Part #99922202525
EHC-3000 Part #99922202584

Mail to:

ECHO, INCORPORATED
400 OAKWOOD ROAD
LAKE ZURICH, IL 60040
ATTN: TECHNICAL PUBLICATION



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400 OAKWOOD ROAD
LAKE ZURICH, IL 60047