



OPERATOR'S MANUAL
MANUEL D'UTILISATION
BEDIENUNGSANLEITUNG
MANUALE ISTRUZIONI

MODEL
DHC-30

ENGLISH

FRANCAIS

DEUTSCH

ITALIANO



WARNING, SEE OPERATOR'S MANUAL
LIRE SOIGNEUSEMENT CE MANUEL AVANT
TOUTE UTILISATION
ACHTUNG SIEHE BEDIENUNGSANLEITUNG
ATTENZIONE, LEGGETE IL MANUALE ISTRUZIONI

Important information

Please ensure that you read the operator's manual before using your product.

● Intended use of this product

- This product is an Electric Battery Hedge Clipper. It is intended to be used for hedge and shrub trimming. Do not use this product for any purpose other than aforementioned.

● Users of the product

- You should not use this product until you have read the operator's manual carefully and fully absorbed its content.
- This product should not be used by anyone who has failed to read the operator's manual properly, is suffering from a cold, tiredness or otherwise in poor physical condition, or children.

● About your operator's manual

- This manual contains necessary information about the assembly, operation, and maintenance of your product. Please read it carefully and absorb its contents.
- Always keep your manual in a place where it is readily accessible.
- If you have lost your manual or it is damaged and no longer readable, please purchase a new one from your ECHO DEALER.
- The units used in this manual are SI units (International System of Units). Figures in parentheses are reference values, and there may be a slight conversion error in some cases.

● Loaning or assigning your product

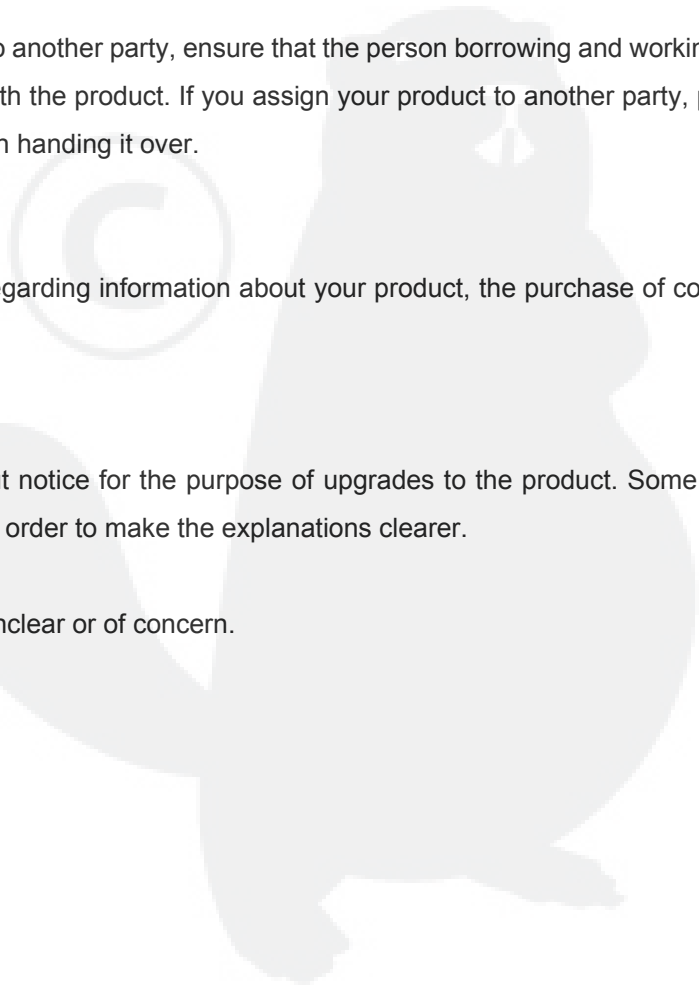
- When loaning the product described in this manual to another party, ensure that the person borrowing and working with the product receives the instruction manual along with the product. If you assign your product to another party, please enclose the instruction manual with the product when handing it over.

● Enquiries

- Please contact your ECHO DEALER for requests regarding information about your product, the purchase of consumables, repairs, and other such enquiries.

● Notices

- The content of this manual may be changed without notice for the purpose of upgrades to the product. Some of the illustrations used may differ from the product itself in order to make the explanations clearer.
- This product requires the assembly of some parts.
- Please consult your ECHO DEALER if anything is unclear or of concern.



General Safety Rules

WARNING! *Read all instructions Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all the warnings below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.*

SAVE THESE INSTRUCTIONS

1) Work area

- a) **Keep work area clean and well lit.** *Cluttered and dark area invite accidents.*
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
- c) **Keep children and bystanders away while operating a power tool.** *Distraction can cause you to lose control.*

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plug with earthed(grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

3) Personal safety

- a) **Stay alert, watch what you are going and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use safety equipment. Always wear eye protection.** *Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate*
- c) **Avoid accidental starting. Ensure the switch is in the off-position before plugging in.** *Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.*
- d) **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of these devices can reduce dust-related hazards.*

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tool. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

Hedge trimmer safety warnings:

- **Keep all parts of the body away from the cutter blade. Do not remove cut material or hold material to be cut when blades are moving. Make sure the switch is off when clearing jammed material.** *A moment of inattention while operating the hedge trimmer may result in serious personal injury.*
- **Carry the hedge trimmer by the handle with the cutter blades stopped. When transporting or storing the hedge trimmer always fit the cutting device cover.** *Proper handling of the hedge trimmer will reduce possible personal injury from the cutter blades.*
- **Keep cable away from cutting area.** *During operation the cable may be hidden in shrubs and can be accidentally cut by the blade.*













TABLE OF CONTENTS

Important information.....	2	ASSEMBLY/PRE-OPERATION.....	16
General Safety Rules	3	Pre-Operation.....	16
Hedge trimmer safety warnings.....	4	OPERATION	17
TABLE OF CONTENTS.....	5	Determine ration	17
DECALSAND SYMBOLS.....	6	Starting.....	17
SAFETY INSTRUCTIONS.....	7	Stopping.....	18
Safety Symbols	7	Trimming.....	18
Equipment.....	7	MAINTENANCE.....	18
Parts	7	Maintenance Intervals.....	19
Electrical System	8	Blade Cleaning & Lubrication.....	19
Personal Condition and Safety Equipment.....	9	Cleaning Battery.....	19
Operation Safety.....	11	Greasing Gear Box.....	20
Extended Operation/Extreme Conditions.....	12	Sharpening Blades.....	20
DESCRIPTION.....	13	STORAGE.....	20
DECALS.....	15	BATTERY RECYCLE.....	21
SPECIFICATIONS.....	15	DECLARATION.....	22

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.



DECALS AND SYMBOLS

Symbol from/shape	Symbol description/application	Symbol from/shape	Symbol description/application
	Carefully read the operator's manual		Caution, finger severing
	General warning, caution, risk of danger		Caution, toxic risk
	Wear eyes, ears and head protection		Caution, risk of corrosion
	Do not use tool in under wet weather conditions		Environmental protection! Do not dispose of the device together with your domestic refuse. Please dispose of the device itself at an according collecting/recycling point.
	Caution, unplug immediately if the power cord or plug becomes damaged		Environmental protection! Do not dispose of the battery(Pb) together with your domestic refuse. Please dispose of the battery(Pb) itself at an according collecting/recycling point.
	Caution, beware of electric shocks		Guaranteed sound power level

SAFETY INSTRUCTIONS FOR ELECTRIC BATTERY HEDGE CLIPPER

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.

SAFETY SYMBOLS

Throughout this manual and on the product itself, you will find safety alerts and helpful, information messages preceded by symbols or key words. The following is an explanation of those symbols and key words and what they mean to you.



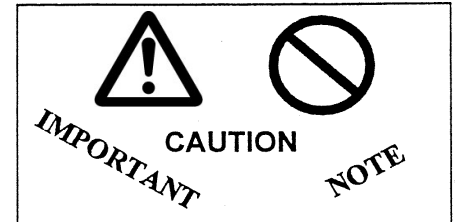
This symbol accompanied by the words **WARNING** and **DANGER** calls attention to an act or condition that can lead to serious personal injury to operator and bystanders.



This symbol accompanied by the word **CAUTION** call attention to a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. **CAUTION** may be used to alert against unsafe practices associated with events that could lead to personal injury.



The circle with the slash symbol means whatever is shown within the circle is prohibited.



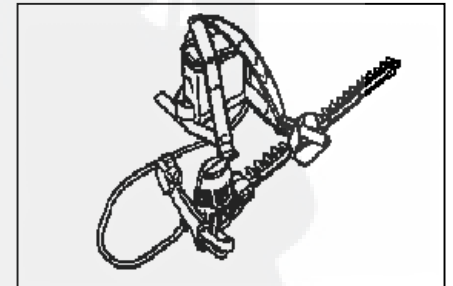
IMPORTANT: The enclosed message provides information necessary for the protection of the unit.

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

EQUIPMENT - MAINTAIN HEDGE TRIMMER WITH CARE

Before operation a complete check of the unit must be performed:

- Check unit for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other condition that may affect the units operation.
- Keep cutting edge sharp and clean for best performance and to reduce the risk of injury.
- Follow instructions for lubricating blades on page 19.
- Inspect hedge trimmer battery cord periodically, and if damaged, have it repaired by an authorized ECHO agency.(ECHO service dealer)
- Keep handles dry, clean, and free from oil and grease.
- Follow all maintenance procedures carefully.



PARTS - CHECK DAMAGED PARTS

- Do not use the Hedge Clipper if any part is damaged or missing.
- Before further use of the hedge trimmer, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function.
- A guard or other part that is damaged should be properly repaired or replaced by an authorized ECHO agency.(ECHO service dealer)
- Use only the ECHO Battery Pack and Charger supplied with this unit.
- Do not use any attachment or accessory other than recommended in this Operator's Manual: avoid the risk of serious personal injury.



STORE IDLE HEDGE CLIPPER INDOORS

When not in use, hedge clipper should be stored indoors in dry, and high or locked-up place - out of reach of children.

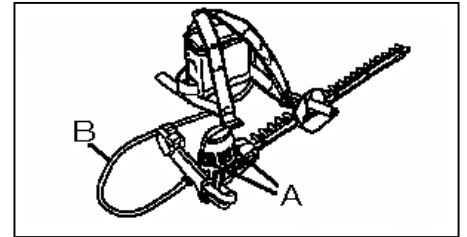
ELECTRICAL SYSTEM

WARNING DANGER

When using electric hedge clippers, basic safety precautions should always be followed to reduce risk of fire, electric shock, and personal injury.

The motor is kept cool by the air vents (A). Make sure motor housing and air vents are kept clean and free of dirt and any obstruction.

Do not abuse electrical cords. Do not carry Hedge Clipper by the cord or yank cord when disconnecting unit from battery pack. Keep cord (B) away from heat, oil, grease and sharp edges.

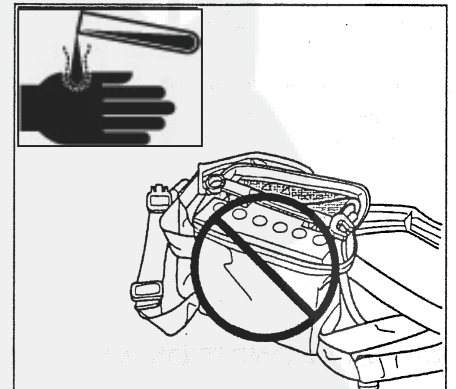


WARNING DANGER

Never throw battery into a fire, it could explode. Keep battery away from spark or flame. Do not clean battery with any flammable substance. Do not take battery apart. Do not remove battery cover or strike it. Do not pull battery cord. Do not open or mutilate the battery(ies). Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed. If battery acid gets on skin or clothing, rinse immediately with clean water and baking soda. If acid enters eye, rinse with clean water and baking soda and seek immediate help from a physical.

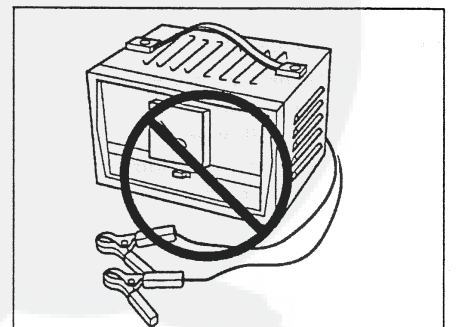
- Exercise care when handling the battery in order not to short the battery with conducting materials such as rings, bracelets, tools and keys. The battery or conductor may overheat and cause burns.
- If the battery will not accept a charge or is depleted requiring disposal, contact your local government authority for proper disposal codes and/or regulations.

Do not place unit in damp or wet places, which could impair the unit's electrical insulation.



WARNING DANGER

Always use the battery and charger supplied with the unit or replacements approved by ECHO, (KIORITZ CORPORATION). Using the wrong charger, especially an auto battery charger, can result in battery damage or serious personal injury.



Do not charge Hedge Clipper in rain or in wet locations.

Do not use the Hedge Clipper in the rain or in damp or wet conditions, which increase the danger of electrical shock and cause slippery footing.

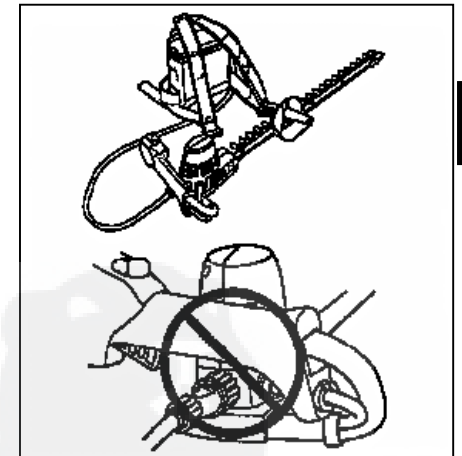
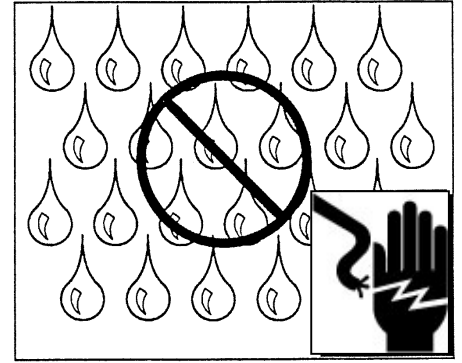
WARNING DANGER

Do not recharge battery in a confined or un-vented area. Do not smoke, strike a match or cause a spark in the vicinity of the battery during charging. Operator injury may result.

Electrical motors and switches give off sparks when turned on and off. Never use the Hedge Clipper or charger near any flammable substances such as lacquer, paint, benzine, paint thinner, gasoline or adhesives, etc.

Avoid unintentional starting of the Hedge Clipper. Do not carry the Hedge Clipper connected to the battery with the switch on. Before plugging in Hedge Clipper, make sure switch is off. When moving the point of operation or taking a break, always stop the unit, disconnect the unit from the battery pack and cover the blade.

Always disconnect the Hedge Clipper from the battery whenever it is not in use and when performing any type of maintenance such as cleaning the blade.



PERSONAL CONDITION AND SAFETY EQUIPMENT

Physical Condition --

Your judgment and physical dexterity may not be good:

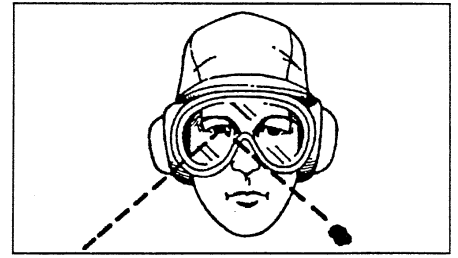
- if you are over tired or sick,
- if you are taking medication,
- if you have taken alcohol or drugs.

Operate unit only if you are physically and mentally well.



Eye Protection --

Eye protection goggles that meet ANSI Z87.1 requirements must be worn whenever you operate the hedge clipper.

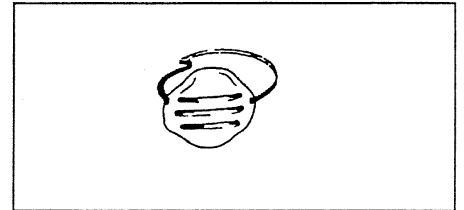


Dust Protection --

Wear face or dust mask if operation is dusty.

Hand Protection --

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.

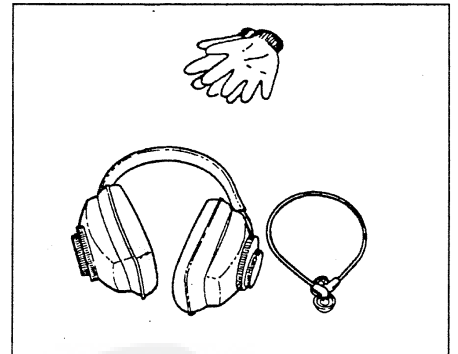


WARNING



DANGER

Hedge Clipper Blades are very sharp. Wear gloves to protect hands.



Hearing Protection --

Wear hearing protection. OSHA requires the use of hearing protection if this unit is used 2 hours per day or more. ECHO recommends wearing hearing protection whenever unit is used.

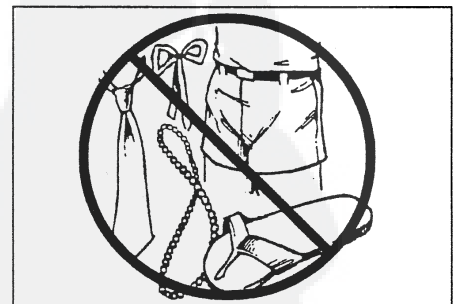
Proper Clothing --

Wear snug fitting, durable clothing;

- Pants with long legs, shirts with long sleeves.
- Wear protective hair covering to contain long hair.
- DO NOT WEAR LOOSE CLOTHING, BECAUSE IT CAN GET CAUGHT IN HEDGE CLIPPER MOVING PARTS.
- DO NOT WEAR SHORTS.
- DO NOT WEAR TIES, SCARFS, JEWELRY.

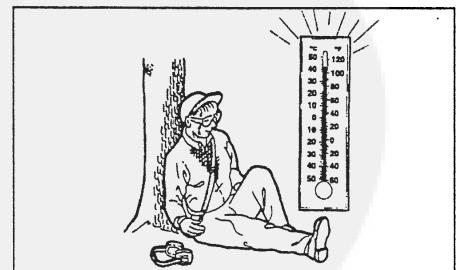
Wear sturdy work shoes with nonskid soles;

- DO NOT WEAR OPEN TOED SHOES.
- DO NOT OPERATE UNIT BAREFOOTED.



Hot Humid Weather --

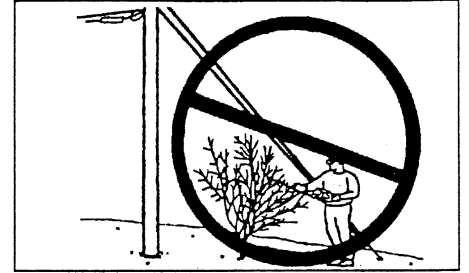
Heavy protective clothing can increase operator fatigue which may lead to heat stroke. Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.



OPERATION SAFETY

Determine Operation Area

- Review the area to be trimmed. Look for hazards that could contribute to unsafe conditions. DO NOT operate unit if any wires (power, telephone, cable, etc.) are closer than 10 feet (3 meters) to any part of the operator or unit.
- Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 15 ft. (4.6 meters) while the Hedge Clipper is in use.

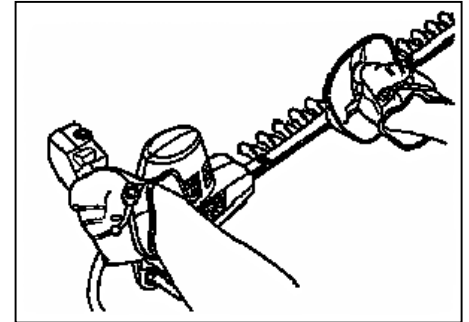


WARNING DANGER

Risk of Cut - Keep Hands Away From Blades or serious personal injury may result.

Hold the front end and rear handles with both hands, with thumbs and all fingers tightly encircling the handles. Keep both hands on handles when power is on.

Do not attempt to remove cut material nor hold material to be cut when blades are moving. Make sure trimmer switch is off when clearing jammed material from blades. Do not grasp the exposed cutting blades or cutting edges when picking up or holding the hedge trimmer.



WARNING DANGER

Blades coast after turn off. Keep hand away from blades or serious personal injury may result.

Use Hedge Clipper Properly -

Do not force the Hedge Clipper. Use the Hedge Clipper only to trim the type of shrub, growth it is designed to cut. Do not cut materials over 1/4" (6mm) in diameter or material that is unusually hard. Forcing or misusing the Hedge Clipper can damage the unit or cause personal injury.

Keep a solid stance -

Maintain footing and balance at all times. Do not stand on slippery uneven or unstable surfaces. Do not work in odd positions or on ladders. Do not overreach.

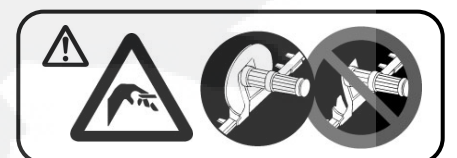
Keep away from blade -

Hold the blade away from your body, do not turn the blade toward yourself. Disconnect battery pack before servicing, cleaning or removing jammed materials from blades.



Avoid unintentional starting -

Don't carry plugged-in hedge clipper with finger on switch. Be sure switch is off when plugging in.

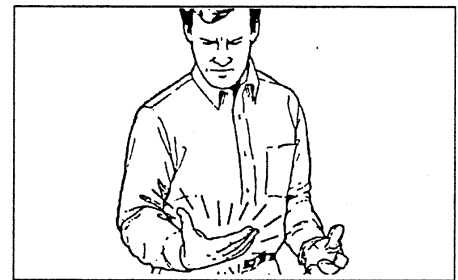
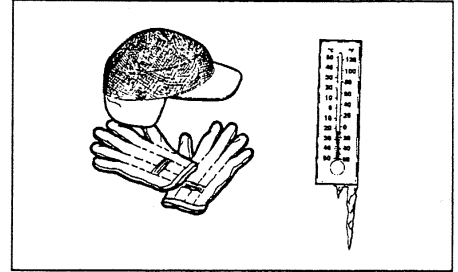


EXTENDED OPERATION/EXTREME CONDITIONS

Vibration and Cold --

It is believed that a condition called Raymond'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 sensations 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.

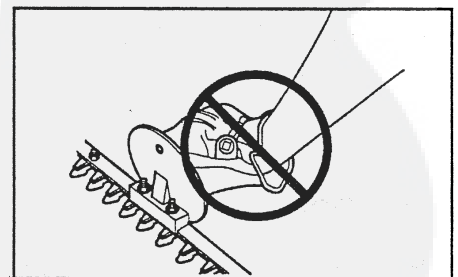
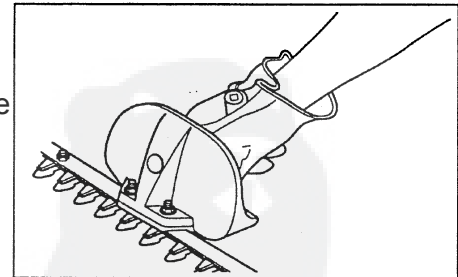
- Keep your body warm, especially the head, neck, feet, ankles, hands and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks and also by not smoking.
- Limit the hours of operation. Try to fill each day with jobs where operating the Hedge Clipper 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.



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 in those areas. 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 contribute to CTS. CTS can cause severe pain for months or even years. To reduce the risk of RSI/CTS, do the following:

- Avoid using your wrist in a bent, extended or twisted position. Instead try to maintain a straight wrist position. Also, when grasping, use your whole hand, not just the thumb and index finger.
- Take periodic breaks to minimize repetition and rest your hands.
- Reduce the speed & force with which you do the repetitive movement.
- Do exercises to strengthen the hand and arm muscles.
- See a doctor if you feel tingling, numbness or pain in the fingers, hands, wrists or arms. The sooner RSI/CTS is diagnosed, the more likely permanent nerve and muscle damage can be prevented.



SAVE THESE INSTRUCTIONS

DESCRIPTION

The ECHO product you purchased has been factory pre-assembled for your convenience.

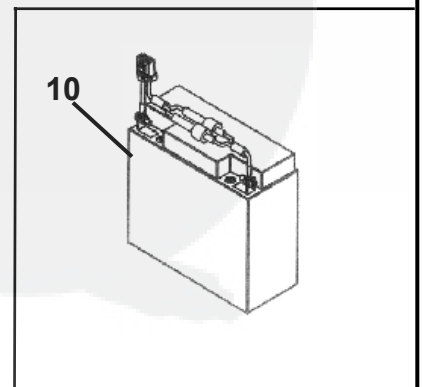
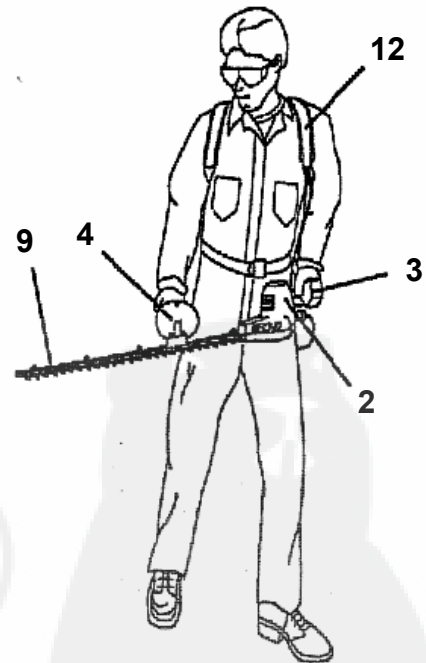
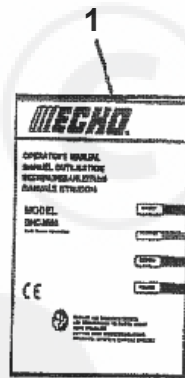
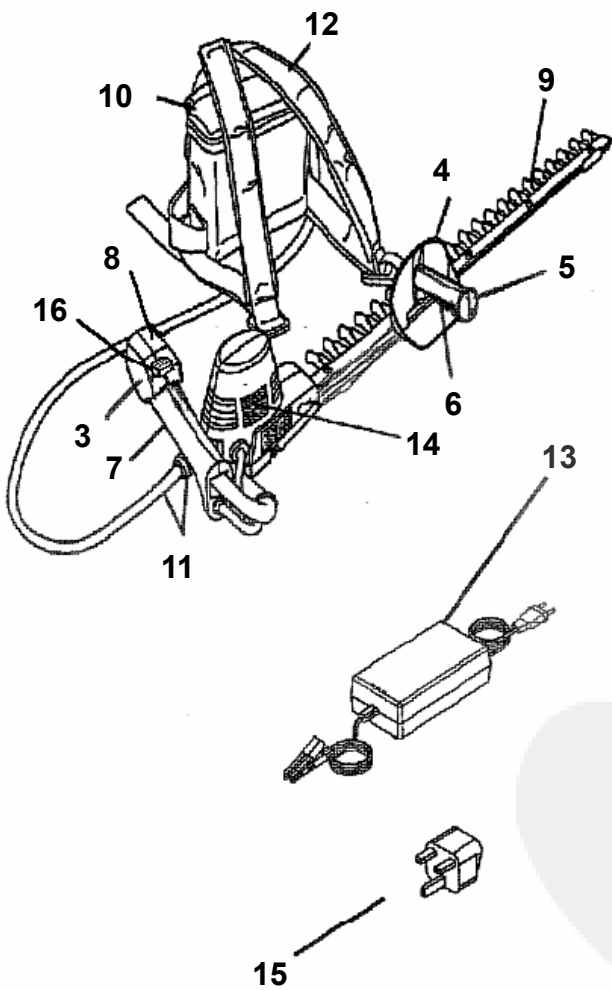
After opening the carton, check for damage. Immediately notify your retailer or ECHO Agency (ECHO Service Dealer) of damaged or missing parts. Use the contents list to check for missing parts.

Contents List

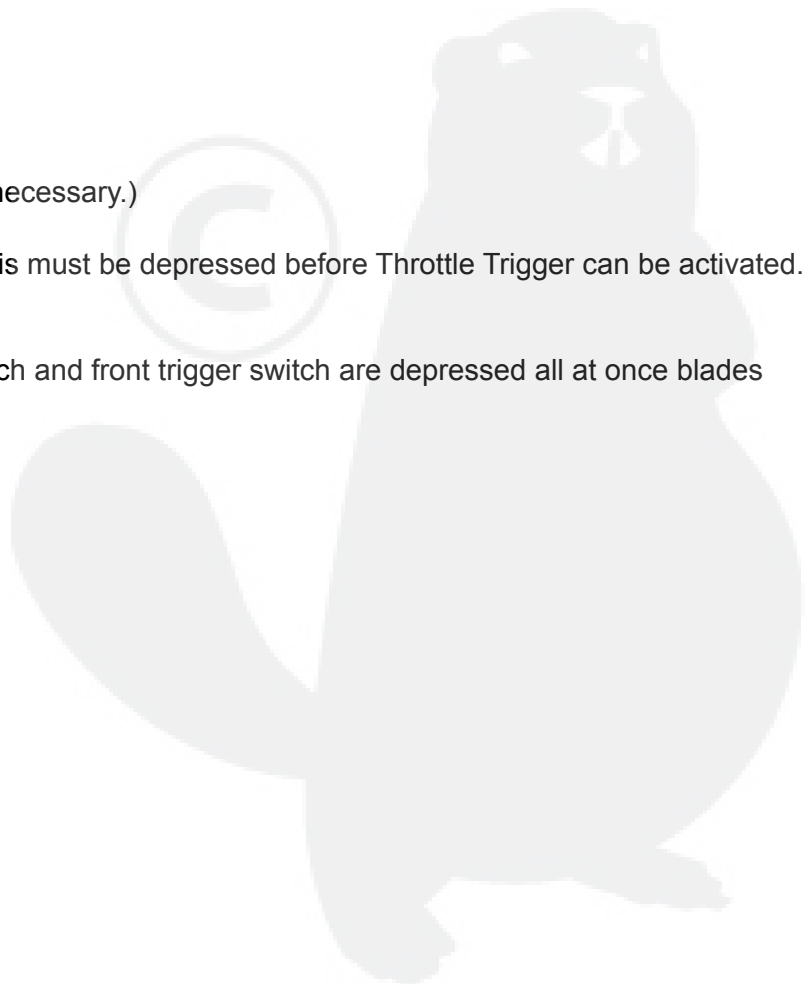
1 - Hedge Clipper Assembly
1 - Charger

1 - Operator's Manual
1 - Plug Converter

1 - Battery Pack Assembly (DHCA-30)



1. OPERATOR'S MANUAL - The Operator's Manual contains specifications and information for operation, starting, stopping, maintenance, storage and assembly specific to this product. Read and understand this manual before operation. Keep manual in a safe location for future reference, i.e., operation, maintenance, storage and specifications.
 2. MOTOR AND GEAR BOXHOUSING-
 3. REAR HANDLE GRIP - Contains the Rear Trigger Switch and Circuit Breaker.
 4. FRONT HANDLE GUARD - Guard protects hand from the blades.
 5. FRONT HANDLE GRIP - Contains the Front Trigger Switch.
 6. FRONT TRIGGER LEVER – Trigger Switch in the Front Handle Grip is controlled by Front Trigger Lever.
 7. REAR TRIGGER LEVER - Trigger Switch in the Rear Handle Grip is controlled by Rear Trigger Lever.
 8. CIRCUIT BREAKER - Automatically stops unit when blade stops because of an excessive load. Safely remove cause of problem and reset circuit breaker by pushing button.
 9. BLADES - Double reciprocating blades mounted to a blade support bar. The DHC-30 has single sided blades, meaning they are capable of cutting on one side of the blade.
 10. BATTERY AND KNAPSACK - Sealed, 12 V^{DC} battery(DHCA-30), in canvas knapsack.
 11. BATTERY CONNECTOR AND CORD-
 12. HARNESS-
 13. CHARGER-
 14. CAUTION LABEL-
 15. PLUG CONVERTER- (Use whenever necessary.)
 16. THROTTLE TRIGGER LOCKOUT –This must be depressed before Throttle Trigger can be activated.
- ※ When two switches of rear trigger switch and front trigger switch are depressed all at once blades will move at full cutting speed.



DECALS, WARNING/INFORMATIONAL

Locate these safety decals on your unit. The complete unit illustration found in the "DESCRIPTION" section, will help you locate them. Make sure the decals are legible and that you understand and follow the instructions on them. If a decal cannot be read, a new one can be ordered from your ECHO dealer. See PARTS ORDERING instructions for specific information.



X505-002140

SPECIFICATIONS

MODEL

DHC-30

Length	1035 mm
Width	244 mm
Height	161 mm
Weight, dry (w/o battery)	3.7 kg
Electrical	
Blades control system	2 – switches control systems
Input power	126 W ---
Rated Current	10.5 A ---
Motor Type	D.C. Motor
Battery	DHCA-30
Battery Type	Valve Regulated Lead-Acid Battery (rechargeable)
Battery Weight	6.1 kg
Battery Voltage	12V ---
Battery Rated Capacity	18 Ah
Tube Fuse	250V /20A(φ 6.35×30L)
Gear Box	
Type	
Lubricant	SHELL Alvania AP(N)2 or equivalent
Deceleration Ratio	1:5.88
Blade	
Type	Oscillating, single edged
Length	750mm
Speed	2000 r /min
Guaranteed sound power level	96 dB(A) :2000/14/EC ISO 3744
Vibration Level	6.2 m/s ² :98/37/EC ISO5349

ASSEMBLY / PRE-OPERATION

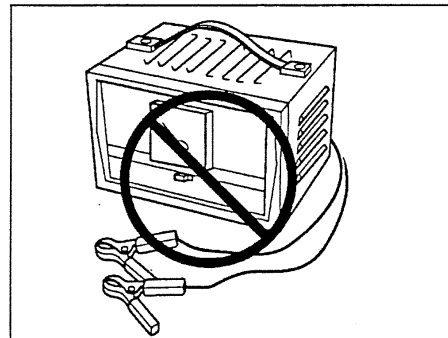
NOTE: The battery is preassembled in the knapsack for your convenience. Follow instructions under "Pre-Operation" for charging the battery before use.

PRE-OPERATION

Charging --

WARNING DANGER

Always use the battery and charger supplied with the unit or replacements approved by ECHO, KIORITZ CORPORATION. Using the wrong charger, especially an auto battery charger, can result in battery damage or serious personal injury.



IMPORTANT: Charge the battery before and after use. Do not charge Hedge Clipper in rain or wet locations. Avoid charging battery when temperature or humidity is high. Do not charge battery for more than 24 hours. It will reduce the life of the battery.

After extended, heavy use or after 4 to 5 years of average use, battery will have to be recharged more and more often and will need to be replaced.

WARNING DANGER

Do not recharge battery in a confined or un-vented area. Do not smoke, strike a match or cause a spark in the vicinity of the battery during charging. Operator injury may result.

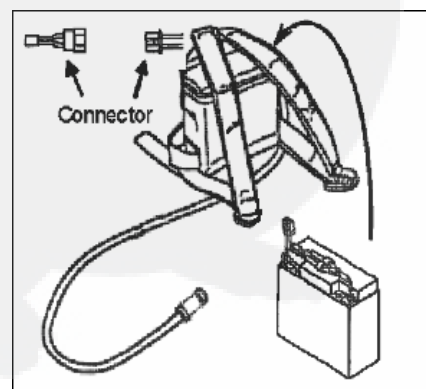
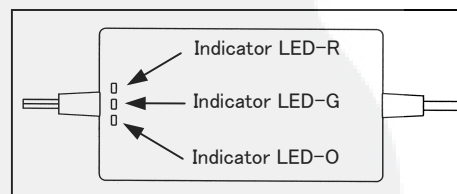
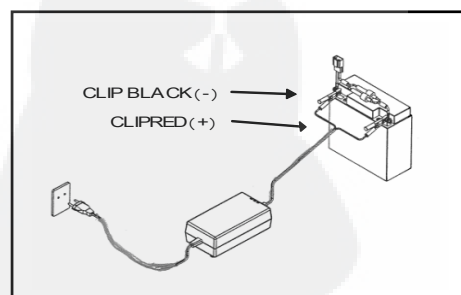
NOTE: It is normal for the battery and charger to be warm during charging.

Before charging battery. The battery is detached from battery case.

1. Carefully, connect each code clips (+)(-) of charger to battery terminal.
2. Plug Charger into 220V~240V AC electrical outlet.
3. Indicator lamps (LED-O, LED-G) lights up when plug of charger is inserted in outlet.

NOTE: Charge Indicator Lamps (LED-O & LED-R) shows that charging has started.

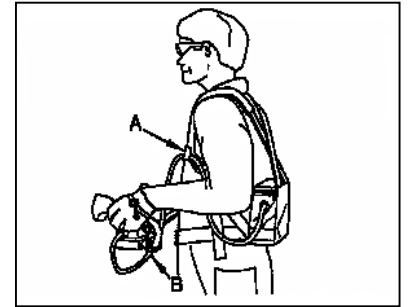
4. Indicator lamps (LED-R & LED-O) light up while charging it.
5. When charge indicator lamp(LED-R) goes out and indicator lamp (LED-G) light up, charging is complete. Disconnect charger from outlet and from battery.
Complete charging depends on amount of use (3 - 3.5 hours).
- ※ Indicator lamps (LED-R): RED.....Charging
Indicator lamps (LED-G): GREEN.....Charging is complete
Indicator lamps (LED-O): ORANGE...Power
6. After charging is completed, put the battery into the battery case.
7. Attach the connector from the battery to the one from the battery case.



Putting On Battery Pack --

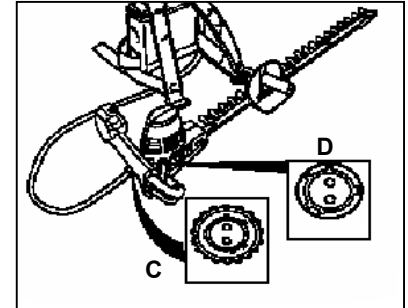
1. Place battery pack harness over shoulders.
2. Pass cord through cord ring (A) on shoulder strap and along left side of body.

IMPORTANT: If cord is in the way of operation, attach cord to cord grip (B) on rear handle.



Connecting Hedge Clipper to Battery --

IMPORTANT: The battery cord has a special connector that plugs into the unit. It plugs in "One-way" only - do not force.



1. Align five ridges on connector (C) with five slots in receptacle (D) of unit and push connector into place. Tighten by turning connector to the right (clockwise). Disconnect by turning connector to the left (counterclockwise) and pulling connector out.

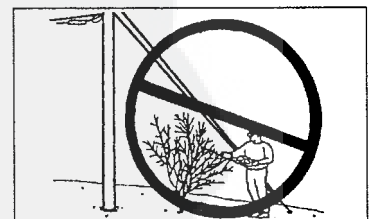
OPERATION

WARNING DANGER

Read and understand all safety information under SAFETY INSTRUCTIONS before operating the Hedge Clipper.

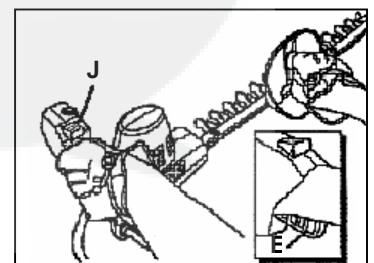
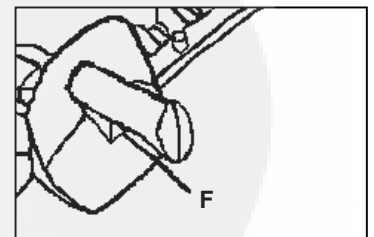
DETERMINE OPERATION AREA

- Review the area to be trimmed. Look for hazards that could contribute to unsafe conditions. DO NOT operate unit if any wires (power, telephone, cable, etc.) are closer than 10 feet (3 meters) to any part of the operator or unit.
- Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 15 ft. (4.6 meters) while the Hedge Clipper is in use.



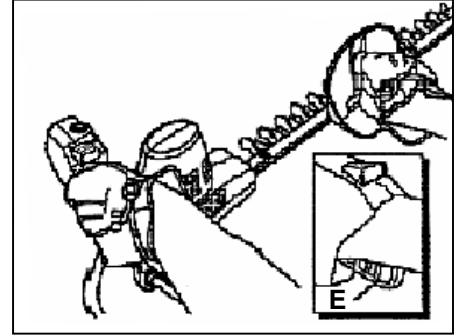
STARTING

1. Squeeze Front Trigger Lever (F)
2. Press Lock Out Lever (J) to release.
3. Squeeze Rear Trigger Switch (E)
4. When two switches of Rear Trigger Lever and Front Trigger Lever are depressed all at once blades will move at full cutting speed.



STOPPING

1. Release Rear Trigger Lever (E) or Front Trigger Lever (F)
: Motor and blade will stop.

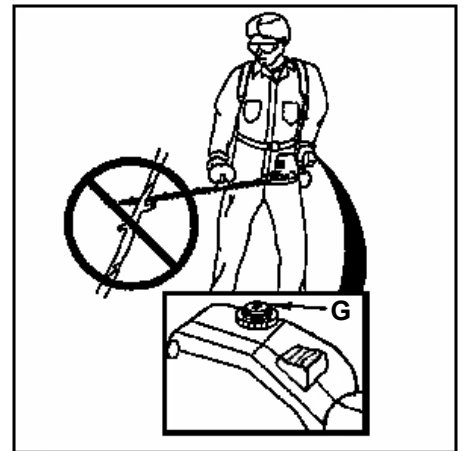


TRIMMING

IMPORTANT: DO NOT cut branches over approximately 1 /4" (6mm) , watch for dangerous foreign objects such as wire or metal

Face material to be trimmed, such as tree leaves or bushes, hold trimmer at a slight angle, squeeze Trigger Switch and begin trimming.

NOTE: If something gets caught in the blade, the circuit breaker (G) will pop out. Disconnect battery cord from unit, remove cause of problem and push circuit breaker back in. (If circuit breaker pops out immediately, wait 30 seconds and push in again). If breaker pops out during no load operation, stop unit and contact your ECHO Agency (ECHO Service Dealer).



WARNING DANGER

In the following situations, release Trigger Switch immediately and disconnect the product from the battery. Ensure that the blades have stopped before checking each area of the product. Replace any damaged parts.

- If the blade hits a rock, tree, post, or other such obstruction while you work.
- If the product suddenly starts to vibrate abnormally.

Continuing to use parts when they are damaged could lead to an accident or serious injury.

MAINTENANCE

SKILL LEVELS

Your ECHO product is designed to provide many hours of trouble free service. Regular scheduled maintenance will help achieve that goal. If you are unsure or are not equipped with the necessary tools, you may want to take your unit to an ECHO Agency (ECHO Service Dealer) for maintenance. To help you decide whether you want to DO-IT-YOURSELF or have the ECHO Agency (ECHO Service Dealer) do it, each maintenance task has been graded.

Level1 = Easy to do. Most required tools come with unit.

Level2 = Moderate difficulty. Some specialized tools may be required.

Level3 = Experience required. Specialized tools are required.

MAINTENANCE INTERVALS

MAINTENANCE			
System/Component	Procedure	Interval	Date Maintenance Performed
Cutting/Blade	Clean and oil	Daily	
	Sharpen	As Required	
Electrical/Battery	Clean	As Required	
Drive/Gear Box	Grease	10 hours	Grease after every use
Air Vents	Clean	Daily	

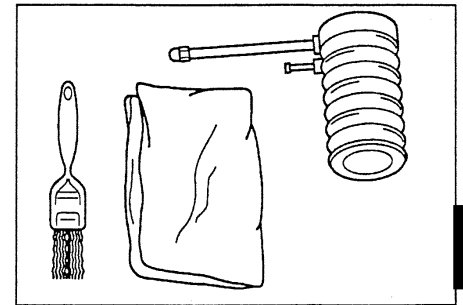
Face material to be trimmed, such as tree leaves or bushes, hold trimmer at a slight angle, squeeze Trigger Switch and begin trimming.

BLADE CLEANING & LUBRICATION

Level 1.

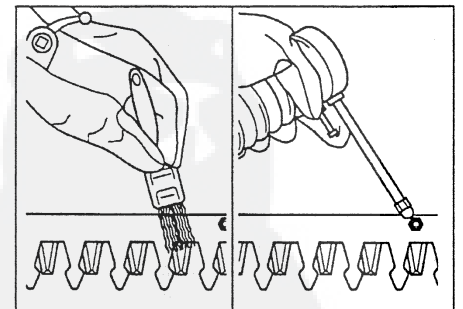
Tools required: Cleaning rag, metal brush, oil can.

Parts required: 30W Engine Oil (lubrication), 50-50 mixture of kerosene and 30W oil (cleaning).



NOTE: Hedge Clipper Blades are very sharp. Wear gloves to protect hands.

1. Brush loose debris from blade and coat both side with 50-50 cleaning mixture.
2. Allow cleaning mixture to soften gummy residue, then wipe blade.
3. Apply clean oil to entire blade including blade bolts.
4. Wipe excess oil from blade.



CLEANING BATTERY

Level 1.

Parts required: Clean, damp cloth.

WARNING DANGER

Never throw battery into a fire, it could explode. Keep battery away from spark or flame. Do not clean battery with any flammable substance. Do not take battery apart. Do not remove battery cover or strike it. Do not pull battery cord. If battery acid gets on skin or clothing, rinse immediately with clean water and baking soda. If acid enters eye, rinse with clean water and baking soda and seek immediate help from a physician.



1. Clean battery with a clean, damp cloth.

GREASING GEAR BOX

Level 2.

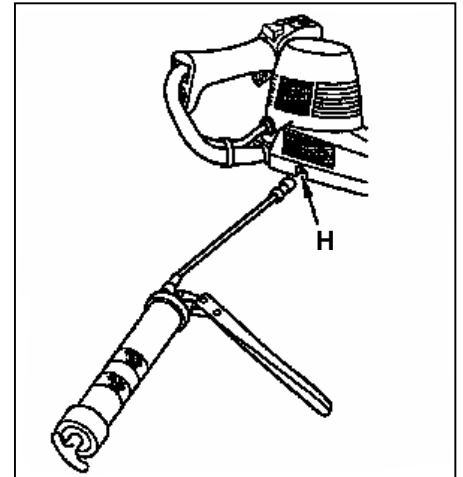
Tools Required: Grease Gun, Clean Rag.

Parts Required: Lithium Base Grease.

IMPORTANT: Carefully pump grease in fitting. **DO NOT** force grease. Too much pressure will force grease past seal and cause damage. **Apply 2 - 3 pumps of grease every 10 hours of operation.**

(1 pump: about 0.5g → 2 - 3 pumps: about 1g~1.5g)

1. Clean dirt from grease fitting (H).
2. Carefully pump grease into fitting (H) until grease comes out overflow hole at end of gear box.



SHARPENING BLADES

LEVEL 3.

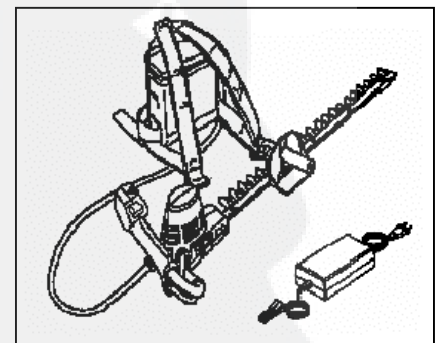
Return unit to your ECHO Agency (ECHO Service Dealer) for proper blade sharpening

STORAGE

Long Term Storage (over 30 days)

IMPORTANT: Always perform the following protective maintenance when-ever storing unit for 30 days or longer.

1. Remove any grease, oil, dirt or debris from unit.
2. Perform any periodic maintenance required, including tightening screws and nuts.
3. Place thin layer of oil on blade to prevent rust.
4. Store unit in dry, dust free place, out of reach of children and away from any flammable substance.
5. Disconnect battery from unit. Charge battery until indicator light goes out or blinks (3 - 3.5 hours). Do not charge battery for more than 24 hours. Place in upright position.



BATTERY RECYCLE

1. DHCA-30 uses the battery including poisonous substance (Pb).
(Valve Regulated Lead-Acid Battery: 12V --- , 18Ah)
2. Amount of lead that this battery include: 48~53% wt%
3. There is the strong acid (diluted sulphuric acid) liquid in the battery.
4. The above-mentioned poisonous substance is contained.
Therefore, please do not teardown or destruction of battery.
5. The battery is not thrown away with usual garbage.
6. Please bring a used battery for DHCA-30 to the ECHO Agency (ECHO Service Dealer).



ECHO Agency (ECHO Service Dealer) name & address is defined in the last page of this Operator's Manual.

MACHINE RECYCLE & DISPOSE

1. Please consult with ECHO Agency (ECHO Service Dealer) when you dispose of an associated part in this machine and these.
2. Please bring machine to dispose of and an associated part to ECHO Agency (ECHO Service Dealer).



ECHO Agency (ECHO Service Dealer) name & address is defined in the last page of this Operator's Manual.



DECLARATION "CE" OF CONFORMITY

The undersigned manufacturer:

**KIORITZ CORPORATION
7-2 SUEHIROCHO 1-CHOME
OHME ; TOKYO 198-8711
JAPAN**

declares that the hereunder specified new unit:

PORTABLE ELECTRIC HEDGE TRIMMER

**Brand : ECHO
Type : DHC-30**

assembled by:

**OPPAMA INDUSTRY CO.,LTD.
14-2 NATSUSHIMA-CHO
YOKOSUKA , KANAGAWA 237-0061
JAPAN**

complies with;

- * the requirements of Directive **98/37/EC(1998)**
(use of harmonized standards with **EN 60745-1, EN 60745-2-15**)
- * the requirements of Directive **2004/108/EC**
(use of harmonized standards with **EN 61000-6-1, EN 61000-6-3
EN 55014-1,EN5514-2 & EN 55022**).
- * the requirements of Directive **2006/95/EC**
(use of harmonized standards with **EN 60355-1, EN 60335-2-29**)
- * the requirements of Directive **2000/14/EC**
Conformity assessment procedure followed **ANNEX V**

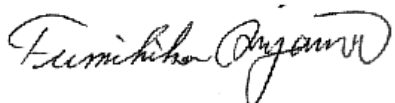
Measured sound power level : **93 dB(A)**

Guaranteed sound power level : **96 dB(A)**

DHC-30 Serial Number 35003001 and up

Tokyo,
March 1st 2008

KIORITZ CORPORATION



F. AIYAMA, GENERAL MANAGER

Authorized Representative in Europe:

Company: Countax Limited

Address: Countax House,Haseley Trading Estate,
Great Haseley,Oxfordshire OX44 7PF,U.K.

Mr. Harry Handkamm

NOTES





KIORITZ CORPORATION

7-2 SUEHIRO 1 CHOME, OHME, TOKYO, 198-8711, JAPAN
PHONE: 81-428-32-6118, FAX: 81-428-32-6145



ECHO®

ECHO Agency (ECHO Service Dealer)

Name & Address

