



Operator's Manual DSRM-2600/U Grass Trimmer / Brushcutter

WARNING

Cancer and Reproductive Harm
www.P65Warnings.ca.gov

WARNING



Read and understand all provided literature before use. Failure to do so could result in serious injury.

Note: This product complies with CAN ICES-003 / NMB-003(B)

TABLE OF CONTENTS

Introduction	3
Servicing Information	4
Parts and Serial Number	4
Service.....	4
ECHO Consumer Product Support.....	4
Product Registration.....	4
Additional Literature.....	4
Safety	5
Manual Safety Symbols and Important Information.....	5
International Symbols	6
Equipment	14
General Safety Warnings and Instructions for the following ECHO tools: All DSRM and DGT models, and DPAS units configured as trimmers and brush cutters	16
Description	20
Contents	22
Assembly.....	23
DSRM-2600	23
DSRM-2600U	23
Blade Installation	24
Nylon Line Head Installation	27
Battery Installation	33
Battery Removal.....	34
Balance and Adjust Unit - U Model.....	34
Operation	35
Operation with Blades	35
Blade Selection.....	37
Starting Unit.....	38
Stopping Unit	40
Applications	40
Operating Techniques - Nylon Line Head.....	40
Operating Techniques - Metal or Plastic Blade.....	41
Reaction Forces	42
Blade Cutting Problems	44
Maintenance.....	45
Skill Levels.....	46
Maintenance Intervals	46
Maintenance and Care	47
Cut-off Knife.....	47
Nylon Line Replacement	49
Troubleshooting.....	52
Storage.....	53
Storage	53
Disposal.....	54
Specifications	56
Warranty.....	57
Product Registration.....	58

INTRODUCTION

Specifications, descriptions, and illustrative material in this literature are as accurate as possible. Specifications are subject to change without notice. Illustrations might include optional equipment and accessories, and might not include all standard equipment. Your equipment might appear slightly different than pictured equipment.



Read and understand all provided literature. Literature contains specifications and information for safety, operation, maintenance, storage, and assembly specific to this product. Scan QR codes for more information.



For additional literature, including safety manuals where applicable, or questions regarding terms used in this manual, visit:

<https://www.echo-usa.com/technical-documentation>



OR

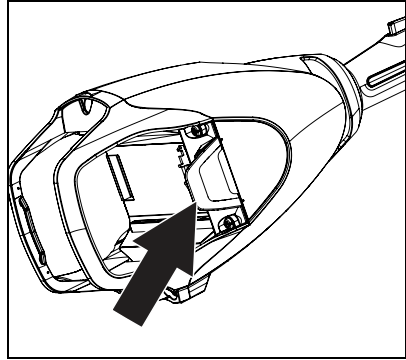
<https://www.shindaiwa-usa.com/technical-documentation>



SERVICING INFORMATION

Parts and Serial Number

Genuine ECHO parts and assemblies for your ECHO products are available only from an Authorized Service Dealer. When you do need to buy parts, always have the model number and serial number of the unit with you. Image shows serial number location. For future reference write them in the space provided below.



Model No. _____ Serial No. _____

Service

Service of this product during the warranty period must be performed by an Authorized Service Dealer. For the name and address of the Authorized Service Dealer nearest you, ask your retailer or call 1-800-432-ECHO (3246). Authorized Service Dealer information is also available on our website <https://www.echo-usa.com>. When presenting your unit for warranty service/repairs, proof of purchase is required.

ECHO Consumer Product Support

If you require assistance or have questions concerning the application, operation, or maintenance of this product, call the ECHO Consumer Product Support Department at 1-800-432-ECHO (3246) from 8:00 a.m. to 5:00 p.m. (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

Product Registration

Register your ECHO equipment online at <https://www.echo-usa.com> or by filling out the product registration sheet included in this manual. Registering your product confirms warranty coverage and provides a direct link to ECHO if we find it necessary to contact you.

Additional Literature

In addition to finding information online, information is available from your Authorized Service Dealer, or by contacting ECHO Incorporated, 400 Oakwood Road, Lake Zurich, IL 60047, 1-800-432-ECHO (3246).

SAFETY

Manual Safety Symbols and Important Information

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

DANGER

The safety alert symbol accompanied by the word “DANGER” calls attention to an act or condition which WILL lead to serious personal injury or death if not avoided.

WARNING

The safety alert symbol accompanied by the word “WARNING” calls attention to an act or condition which COULD lead to serious personal injury or death if not avoided.

CAUTION

The safety alert symbol accompanied by the word “CAUTION” calls attention to an act or condition which might lead to minor or moderate personal injury if not avoided.

NOTICE

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.



CIRCLE AND SLASH SYMBOL

This symbol means the specific action shown is prohibited. Ignoring these prohibitions can result in serious or fatal injury.

International Symbols

Symbol	Description	Symbol	Description
	Warning, See Operator's Manual		Hot Surface
	Wear Eye, Ear and Head Protection		Warning, side thrust
	Wear Hand and Foot Protection		Beware of Fire
	Safety/Alert		Do Not Dispose in Household Trash
			Keep Bystanders and Helpers Away 15 m (50 ft.)
	DO NOT USE LINE HEADS - Blades Only		DO NOT USE BLADES - Line Heads Only
	Do Not Expose to Rain / Water		Disconnect battery before maintenance.
IPX4			Protected Against Splashing Water

Note: Not all symbols will appear on your unit.

Read Manuals

- Provide all users of this equipment with literature for instructions on safe operation.

Clear the Work Area

- Always clear the work area of foreign objects such as rocks, broken glass, nails, wire, or string, which can be thrown or become entangled in the cutting attachment, and check for any hidden hazards. Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 50 ft. (15 m) while the unit is in use.
- Outside the 50 ft. (15 m) zone, there is still a risk of injury from thrown objects.
- Bystanders should be encouraged to wear eye protection.
- If you are approached, stop the unit and cutting attachment.
- When a bladed unit is used, there is the added risk of injury to bystanders being struck with the moving blade in the event of a blade thrust or other unexpected reaction of the blade.

Keep a Firm Grip

- Always hold throttle handle and support handle with thumbs and fingers tightly encircling the handles.

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 over reach.
- Keep cutting attachment below waist.
- Keep all body parts away from rotating cutting attachment.

Handling the Product

General Safety Warnings and Instructions

This section contains the prescribed general safety warnings and instructions for battery-powered products contained in UL 2595 and for handheld tools, transportable tools, and lawn and garden machinery contained in UL 62841-1. Additional important warnings and instructions are provided in subsequent sections of this manual.

Important Safety Instructions

WARNING

Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, serious injury and/or property damage.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce the risk of electric shock.
- **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.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **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.
- **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired, ill, or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Wear ear protection.** Adequate protective equipment will reduce the risk of hearing loss.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance.** Such preventive safety measures reduce the risk of starting the appliance accidentally.
- **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.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

Proper Clothing

Wear snug-fitting, durable clothing.

- Pants should have long legs, shirts should have long sleeves.
- DO NOT WEAR SHORTS.
- DO NOT WEAR TIES, SCARVES, JEWELRY, or clothing with loose or hanging items that could become entangled in moving parts or surrounding growth.
- Keep clothing buttoned or zipped, and keep shirt tails tucked in.
- Wear sturdy work shoes with nonskid rubber soles.
- Wear sturdy, no-slip, rubber work gloves to improve your grip on the handles. Gloves also provide protection against cuts and scratches, cold environments, and reduce the transmission of machine vibration to your hands.
- DO NOT WEAR OPEN TOED SHOES.
- DO NOT OPERATE UNIT WITH BARE FEET.

Power Tool Use and Care

- **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.
- **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.
- **Disconnect the plug from the power source and/or the battery 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.
- **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.
- **Maintain power tools and accessories. 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.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, 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.
- **Keep handles and grasping surfaces dry, clean, and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Battery Tool Use and Care

- **Recharge batteries only with ECHO eFORCE® 56V battery series chargers.** A charger that is suitable for one type of battery may create a risk of fire when used with another battery.
- **Use only with ECHO eFORCE® 56V battery series batteries.** Use of any other battery may create a risk of injury and fire.
- **When battery is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not open or destroy the battery.** Electrolytes contained within the battery are corrosive and may cause damage to eyes or skin if released. It may be toxic if swallowed.
- **Exercise care in handling batteries to avoid shorting the battery with conducting materials such as rings, bracelets, keys, etc.** The battery or conductor may overheat and cause burns if contact with said materials is made.
- **Do not use a battery or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- **Do not expose a battery or tool to fire or excessive temperature.** Exposure to fire or temperature above 130°C (265°F) may cause explosion.
- **Follow all charging instructions and do not charge the battery or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

Service

- **Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.**
- **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.
- **Never service damaged battery packs.** Service of battery packs should only be performed manufacturer or authorized service providers.

Environmentally Safe Battery Disposal



Recycle your ECHO 56V Battery System battery **FOR FREE** at Rechargeable Battery Recycling Corporation (RBRC) recycling locations. Call 1-800-822-8837 or visit <https://www.call2recycle.org> for details.

The toxic and corrosive materials below are in the batteries used in this machine: Lithium-Ion, a toxic material.

WARNING

Discard all toxic materials in a specified manner to prevent contamination of the environment. Before discarding a damaged or worn out Lithium-ion battery, contact your local waste disposal agency, or the local Environmental Protection Agency for information and specific instructions. Take the batteries to a local recycling and/or disposal center, certified for Lithium-ion disposal.

 **WARNING**

If the battery cracks or breaks, with or without leaks, do not recharge it and do not use. Discard it and replace with a new battery. DO NOT TRY TO REPAIR IT! To prevent injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the terminals of the battery with heavy-duty adhesive tape.
- DO NOT try to remove or destroy any of the battery components.
- DO NOT try to open the battery.
- If a leak develops, the released electrolytes are corrosive and toxic. DO NOT get the solution in the eyes or on skin, and do not swallow it.
- DO NOT put these batteries in your regular household trash.
- DO NOT incinerate.
- DO NOT put them where they will become part of any waste landfill or municipal solid waste stream.
- Take them to a certified recycling or disposal center.

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

 **CAUTION**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate equipment.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. The reception can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Equipment

WARNING

Use only approved attachments. Serious injury may result from the use of a non-approved attachment combination. ECHO Incorporated will not be responsible for the failure of cutting devices, attachments or accessories which have not been tested and approved by ECHO Incorporated. Read and comply with all safety instructions.

- **Do not attempt to modify this product. Serious injury can result from the use of any modified product.**
- **Check unit for loose or missing nuts, bolts, and screws. Tighten or replace as needed.**
- **Inspect shield for damage and ensure that shield is properly installed, and that the cut-off knife is securely in place. Replace if either is damaged or missing.**
- **Check that the cutting attachment is firmly attached and in safe operating condition.**
- **Ensure that manufacturer recommended flexible non-metallic line is installed in the trimmer head.**

- Ensure that power switch, lock off lever switch, operator presence switch, and enable button all work properly.
- Check that handle and harness (if included) are installed and adjusted for safe, comfortable operation. See Assembly section for proper adjustment.
- Ensure all ventilation openings are clear of debris.

WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings.

- **ALWAYS** stop unit and make sure all moving parts have come to a complete stop before assembling unit, removing obstructions, clearing debris, or servicing unit.
- **DO NOT** start or operate unit unless all guards and protective covers are properly assembled to unit.
- **ALWAYS** remove battery or unplug unit before adjusting guards or handles.
- **ALWAYS** stop machine, remove battery and inspect if unit strikes a hard object, or if excessive vibration is felt.
- **NEVER** reach into any opening while the unit is running. Moving parts may not be visible through openings.
- Position wiring safely to prevent snagging, separation of connectors, or breakage during operation. Gather excess wire, and secure with wiring clamp if provided on equipment
- Check wiring and connectors for nicks, cuts, exposed wire, or other damage, and repair or replace as needed. Exposed wire or connectors can cause shocks, sparks, and risk of fire or explosion, resulting in serious injury.
- Check wire terminals for secure connections.

General Safety Warnings and Instructions for the following ECHO tools: All DSRM and DGT models, and DPAS units configured as trimmers and brush cutters.

This section contains the prescribed general safety warnings and instructions for handheld, motor-operated electric lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters, and brush saws contained in UL 62841-4-4. Additional important warnings and instructions are provided in subsequent sections of this manual.

WARNING

Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Safety Warnings:

1. **Do not use the machine in bad weather conditions, especially when there is a risk of lightning.** This decreases the risk of being struck by lightning.
2. **Thoroughly inspect the area for wildlife where the machine is to be used.** Wildlife may be injured by the machine during operation.
3. **Thoroughly inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects.** Thrown objects can cause personal injury.
4. **Before using the machine, always visually inspect to see that the cutter or blade and the cutter or blade assembly are not damaged.** Damaged parts increase the risk of injury.
5. **Before use, check the supply cord and any extension cord for signs of damage or aging. Do not use the machine if the cord is damaged or worn. If the cord is damaged or worn during use, switch off the machine and do not touch the cord before disconnecting it from the supply.** A damaged supply cord or extension cord may result in electric shock, fire and/or serious injury.
6. **Follow instructions for changing accessories.** Improperly tightened blade securing nuts or bolts may either damage the blade or result in it becoming detached.
7. **The rated rotational speed of the blade must be at least equal to the maximum rotational speed marked on the machine.** Blades running faster than their rated rotational speed can break and fly apart.

8. **Wear eye, ear, head, and hand protection.** Adequate protective equipment will reduce personal injury by flying debris or accidental contact with the cutting line or blade.
9. **While operating the machine, always wear non-slip and protective footwear. Do not operate the machine when barefoot or wearing open sandals.** This reduces the chance of injury to the feet from contact with the moving cutters or lines.
10. **While operating the machine, always wear safety footwear. Do not operate the machine when barefoot or wearing open sandals.** This reduces the chance of injury to the feet from contact with a moving cutter, line, or blade.
11. **While operating the machine, always wear long trousers.** Exposed skin increases the likelihood of injury from thrown objects.
12. **Keep bystanders away while operating the machine.** Thrown debris can result in serious personal injury.
13. **Always use two hands when operating the machine.** Holding the machine with both hands will avoid loss of control.
14. **Hold the machine by insulated gripping surfaces only, because the cutting line or blade may contact hidden wiring or its own cord.** Cutting line or blades contacting a "live" wire may make exposed metal parts of the machine "live" and could give the operator an electric shock.
15. **Always keep proper footing and operate the machine only when standing on the ground.** Slippery or unstable surfaces may cause a loss of balance or control of the machine.
16. **Do not operate the machine on excessively steep slopes.** This reduces the risk of loss of control, slipping and falling which may result in personal injury.
17. **When working on slopes, always be sure of your footing, always work across the face of slopes, never up or down and exercise extreme caution when changing direction.** This reduces the risk of loss of control, slipping and falling which may result in personal injury.
18. **Keep the supply cord away from the cutter, line or blade.** A damaged supply cord may result in electric shock, fire and/or serious injury.
19. **Keep all parts of the body away from the cutter, line or blade when the machine is operating. Before you start the machine, make sure the cutter, line or blade is not contacting anything.** A moment of inattention while operating the machine may result in injury to yourself or others.

20. **Do not operate the machine above waist height.** This helps prevent unintended cutter or blade contact and enables better control of the machine in unexpected situations.
21. **When cutting brush or saplings that are under tension, be alert for spring back.** When the tension in the wood fibers is released, the brush or sapling may strike the operator and/or throw the machine out of control.
22. **Use extreme caution when cutting brush and saplings.** The slender material may catch the blade and be whipped toward you or pull you off balance.
23. **Maintain control of the machine and do not touch cutters, lines or blades and other hazardous moving parts while they are still in motion.** This reduces the risk of injury from moving parts.
24. **When clearing jammed material or servicing the machine, make sure the switch is off and the battery pack is removed.** Unexpected starting of the machine while clearing jammed material or servicing may result in serious personal injury.
25. **Carry the machine with the machine switched off and away from your body.** Proper handling of the machine will reduce the likelihood of accidental contact with a moving cutter, line, or blade.
26. **When transporting or storing the machine, always fit the cover on metal blades.** Proper handling of the machine will reduce the likelihood of accidental contact with the blade.
27. **Only use replacement cutters, lines, cutting heads and blades specified by the manufacturer.** Incorrect replacement parts may increase the risk of breakage and injury.

Blade Thrust Safety Warnings:

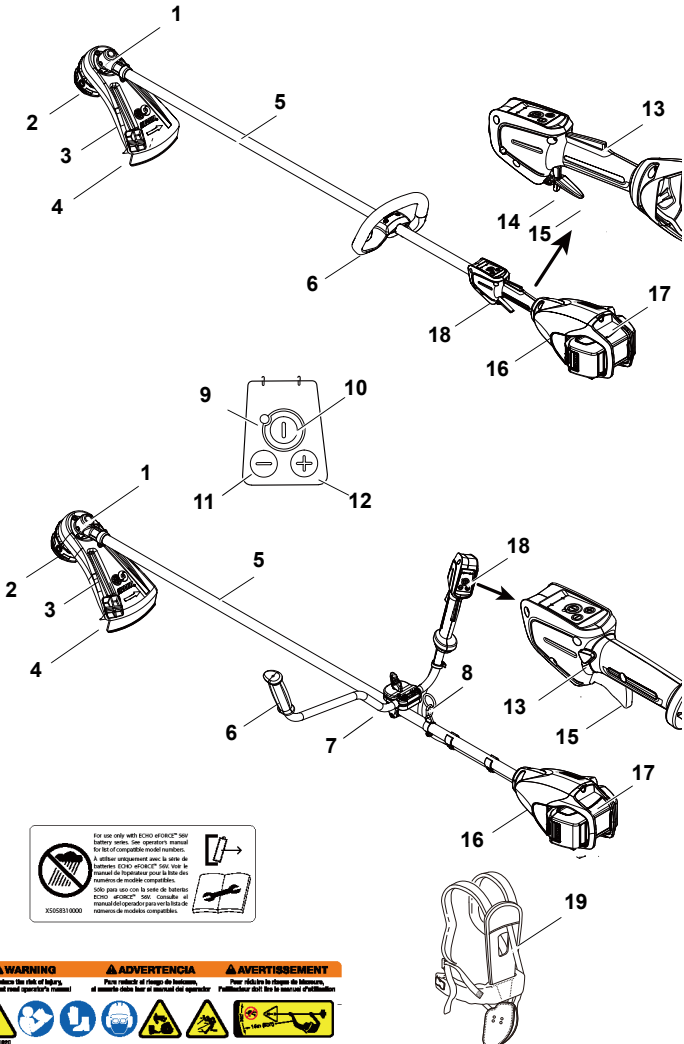
1. Blade thrust is a sudden sideways, forward or backward motion of the machine, which may occur when the blade jams or catches on an object such as a sapling or a tree stump. It can be violent enough to cause the machine and/or operator to be propelled in any direction, and possibly lose control of the machine.
2. **Maintain a firm grip with both hands on the machine and position your arms to resist blade thrust. Position your body to the left side of the machine.** Blade thrust can increase the risk of injury due to the machine moving unexpectedly. Blade thrust can be controlled by the operator if proper precautions are taken.
3. **If the blade binds, or when interrupting a cut for any reason, switch the machine off and hold the machine motionless in the material until the blade comes to a complete stop. While the blade is binding, never attempt to remove the machine from the material or pull the machine backward while the blade is in motion, otherwise blade thrust may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.

4. **Do not use blunt or damaged blades.** Blunt or damaged blades increase the risk of jamming or catching on an object resulting in blade thrust
5. **Always maintain good visibility of the material being cut.** Blade thrust is more likely to occur in areas where it is difficult to see the material being cut.
6. **If you are approached by another person while operating the machine, switch the machine off.** There is an increased risk of injury to other persons being struck by the moving blade in the event of blade thrust.

DESCRIPTION

Locate the safety decal(s) or etching(s) on your unit. Make sure they are legible, and that you understand and follow the instructions. If any cannot be read, replacements can be ordered from your ECHO dealer.

Images shown here and throughout the manual are for example only. Your unit might appear slightly different



1. Gear case
2. Nylon line head
3. Debris shield
4. Cut-off knife
5. Drive shaft assembly
6. Support handle - for left hand
7. U-Handle assembly
8. Harness ring
9. Power indicator LED
10. Enable button
11. - Button
12. + Button
13. Operator presence switch
14. Lock off lever switch
15. Power switch
16. Power head
17. Battery compartment
18. Throttle handle - for right hand
19. Shoulder harness

CONTENTS

The ECHO product you purchased has been factory pre-assembled for your convenience. Due to packaging restrictions, some assembly may be necessary.

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

DSRM-2600:

- 1 Power head / drive shaft assembly
- 1 Operator's manual
- 1 Battery*
- 1 Battery charger*

DSRM-2600U:

- 1 Power head / drive shaft assembly
- 1 U-Handle assembly
- 1 U-Handle bolt
- 1 Shoulder harness
- 1 Operator's manual
- 1 Battery*
- 1 Battery charger*
- 1 Shield without cut-off knife
- 3 Lock nuts (shield mounting)
- 1 Upper blade fixing plate
- 1 Lower blade fixing plate
- 1 Large nut (blade mounting)
- 1 Cotter pins

*Not all units include battery and charger.

NOTICE

For a complete list of compatible batteries for this and all ECHO 56V battery system tools, scan this code or visit <https://www.echo-usa.com/battery-information>

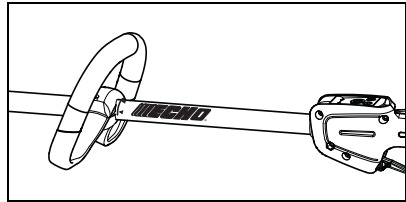


ASSEMBLY

DSRM-2600

Note: Label shows minimum spacing for support handle location.

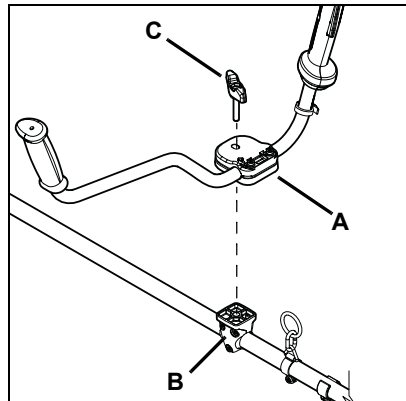
1. If necessary, position support handle for comfortable operation and securely tighten screws.



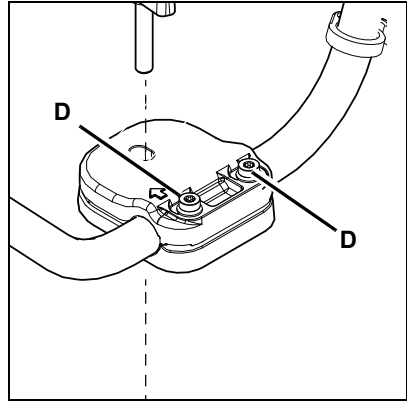
DSRM-2600U

Parts required: U-Handle assembly, handle bolt

1. Install U-handle clamp (A) to drive shaft clamp (B). Secure with U-handle bolt (C).



- Loosen upper two (2) U-handle clamp screws (D) and position U-handle assembly for comfortable operation.
- Tighten U-handle clamp screws.



Blade Installation

! WARNING

You must install the U-handle and all blade conversion parts shown in the following instructions before operating this unit with a metal blade, otherwise serious injury may result.

! WARNING

Shield with cut-off knife is for use with the nylon line head only. Install shield without cut-off knife when using plastic or metal blades, or serious injury may result.

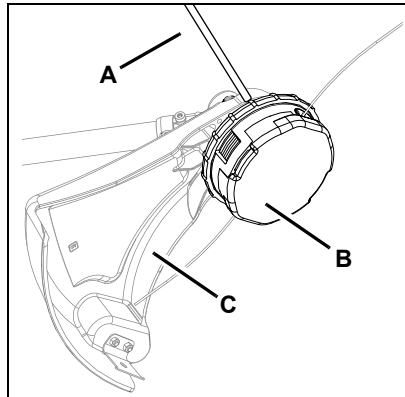
Note: Blades must be selected for type of cutting being performed. See "Blade Selection."

Install Blade Shield

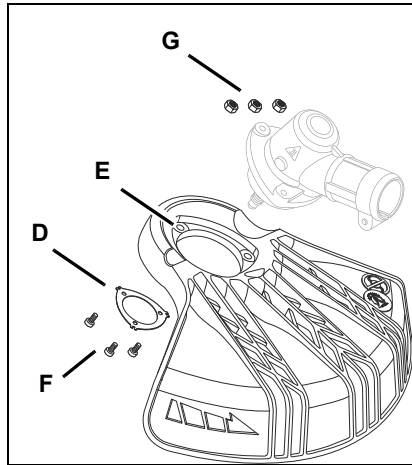
Parts required: Shield without cut-off knife, shield plate, three bolts, three lock nuts

- Remove nylon line head, line head plate, shield plate, and shield with cutoff knife if installed.

- a. Align notch in edge of shield and hole in the line head plate with notch in edge of gear housing and insert head locking tool (A).
- b. Remove line head (B) by turning it clockwise.
- c. Remove locking tool (A) and line head plate.
- d. Remove three screws holding shield plate and shield with cutoff knife (C) to gear housing.
- e. Save line head, shield plate, and shield with cut-off knife for conversion back to nylon line head operation.



2. Align holes in shield plate (D) with holes in shield (E) and bottom of gear case flange.
3. Install three bolts (F) and three lock nuts (G).
4. Tighten all shield hardware.



Install Blade

Parts required: Upper plate with pilot, lower plate, 10 mm nut with left-hand threads, 2 x 25 mm cotter pin, blade.

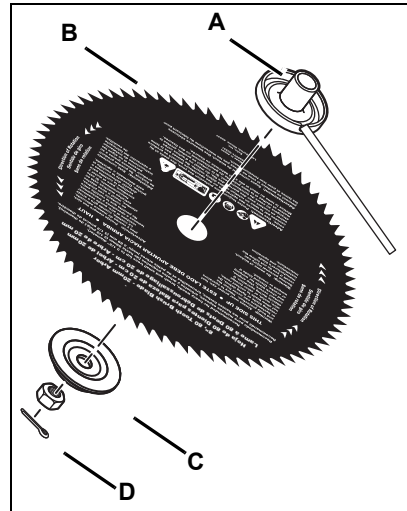
NOTICE

Blades must be installed so that rotation arrow on blade matches rotation of unit (see debris shield).

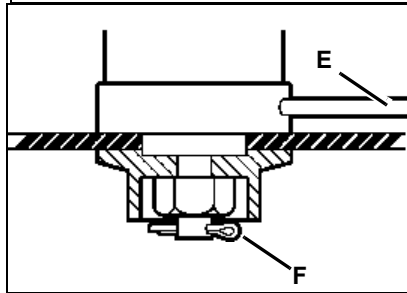
NOTICE

Never reuse a cotter pin. Install a new cotter pin each time a blade is installed or replaced.

1. Install upper plate with pilot (A) on splined PTO shaft with the pilot side out.
2. Install blade (B) on upper plate pilot.
3. Secure blade with lower plate (C), and 10 mm nut (D). Turn nut counterclockwise on PTO shaft to tighten.



4. Align hole in upper plate with notch in gear housing, and insert locking tool (E) to prevent splined shaft from turning. Tighten the 10 mm nut securely.



5. Insert new cotter pin (F) in hole in PTO shaft, and bend pin legs around shaft counterclockwise to secure 10 mm nut.
6. Remove locking tool (E).

Shield Installation

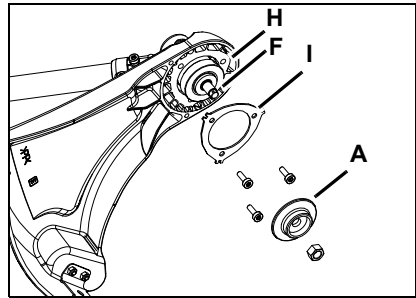
(Nylon line operation)

Parts required: Shield with cutoff knife, shield plate, three screws, line head plate.

WARNING

Shield with cut-off knife is for use with the nylon line head only. Install shield without cutoff knife when using plastic or metal blades, or serious injury may result.

1. Remove blade, blade mounting hardware, and shield without cut-off knife, and save for future use with blade conversions.
2. Align holes in shield (H) shield plate (I) and bottom of the gear case flange. Install three (3) screws.
3. Install line head plate (A) on PTO shaft (F).



Nylon Line Head Installation

Parts Required: Nylon line head.

CAUTION

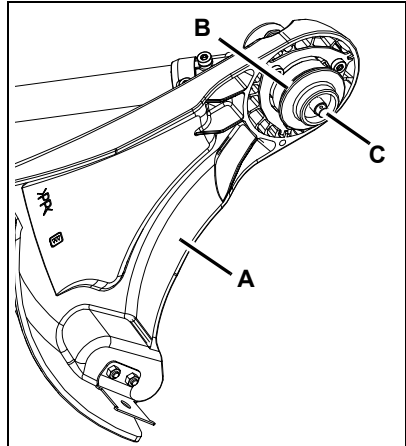
Wear gloves or personal injury may result:

- **Cut-off knife is sharp.**
- **Gearcase and surrounding area may be hot.**

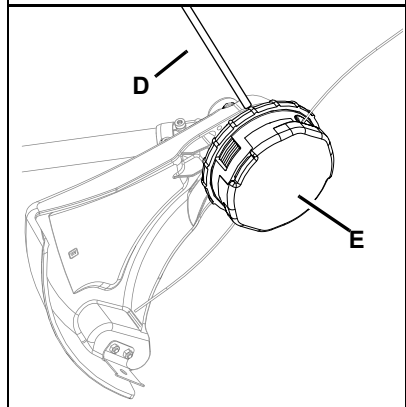
NOTICE

Semi-automatic nylon line heads must be used only with debris shield with cut-off knife. Using nylon line heads with debris shield without cutoff knife can result in trimmer damage, caused by operation with excessive line length.

1. Ensure shield with cut-off knife (A) and shield plate (B) are properly installed, and line head plate (C) is installed on splined PTO shaft.



2. Align notch in edge of shield and hole in line head plate with notch in edge of gear housing and insert head locking tool (D).
3. Thread line head (E) onto PTO shaft by turning it counterclockwise until head is tight against line head plate.
4. Remove locking tool (D).



Note: Your nylon line head may appear different than nylon line head shown.

Temperature Information

Recommended Ambient Temperatures:

	Charging		Usage/Discharge		Storage	
	Low	High	Low	High	Low	High
Product (1)	Not Applicable		32°F (0°C)	113°F (45°C)	32°F (0°C)	113°F (45°C)
Battery (2)(3)	39°F (4°C)	104°F (40°C)	32°F (0°C)	113°F (45°C)	32°F (0°C)	113°F (45°C)
Charger	39°F (4°C)	104°F (40°C)	Not Applicable		32°F (0°C)	113°F (45°C)

(1) Assumes the battery is just off the charger or stored at the temperature range noted for charger usage 39°F (4°C) - 104°F (40°C).

(2) Hot batteries in high ambient temperatures require longer charge times.

(3) To maximize life of batteries being stored more than 3 months, ECHO recommends batteries being stored at 3 green lights on the battery capacity indicator (BCI) at an ambient temperature of 60°F (16°C) - 80°F (27°C), and not in direct sunlight.

Note: Long term storage of batteries in conditions or charge levels on the battery capacity indicator (BCI) other than noted above could reduce the performance and runtime of the battery.

Battery Charging

NOTICE

See separate operator's manuals packaged with battery and charger.

WARNING

- Use only with ECHO eFORCE® 56V battery series batteries and chargers.
- Keep charger and battery away from damp conditions and all liquids.
- Do not operate the charger on an easily combustible surface (e.g. paper, textiles) or in an environment with a high risk of fire.
- Do not cover the charger. Covering the charger will prevent it from cooling.
- Do not operate the charger in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Charger can produce sparks which may ignite the dust or fumes - there is a risk of explosion.
- Connect the charger only to the mains of voltage and frequency specified on the rating plate.
- Connect the charger only to an easily accessible wall outlet.
- Never insert objects in the battery's or charger's cooling slots.
- Do not charge or use a defective, damaged or deformed battery and charger.
- Do not open, damage or drop the battery or the charger.
- Fluid may leak from the battery if it is damaged or not used properly; avoid contact with the skin. In the event of accidental contact, wash the affected areas of the skin with plenty of water and soap. If fluid gets in the eyes, do not rub. Rinse the eyes with plenty of water for at least 15 minutes. Also seek medical assistance.
- Never bridge (short circuit) the battery contacts or the charger's terminals with metallic objects.

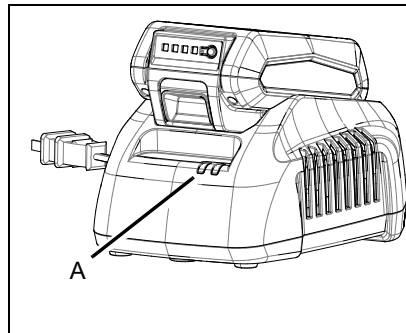
- **Protect from direct sunlight, heat and open flames and never throw battery into fire; there is a risk of explosion.**
- **In the event of smoke or fire in the charger, disconnect it from the wall outlet immediately.**
- **If the connecting cord is damaged, immediately disconnect the plug from the power supply to avoid the risk of electric shock.**
- **Do not expose battery to microwaves or high pressure.**
- **To reduce the risk of stumbling, position and mark the connecting cord in such a way that it cannot be damaged or endanger others.**

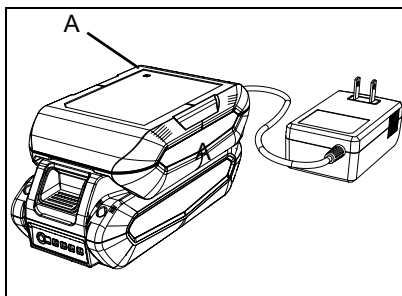
NOTICE

Battery comes partially charged from the factory and needs to be fully charged before first use. Charge battery when it no longer produces sufficient power to operate the unit or when battery lights indicate that the battery is low.

Note: Your charger might look different from those pictured.

1. Plug charger AC cord in the wall outlet.
2. Align ridges on battery with grooves on charger, and slide battery into charger.
3. During normal charging, the charger LED (A) will blink GREEN.





NOTICE

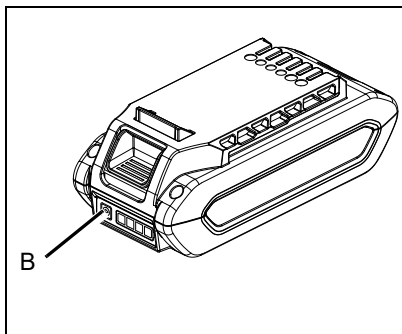
If charger detects a problem, LED will blink RED. Remove battery from charger, clear obstructions from contacts and reinstall battery into charger. If battery is outside acceptable temperature range (see recommended ambient temperature chart) LED will remain RED.

4. When charging is complete, LED will remain GREEN. See battery manual for charging time.

5. Verify battery is fully charged. Remove battery from charger, press battery charge status button (B), and check LED display.

- One green light indicates that the battery has 1-24% charge.
- Two green lights indicate that the battery has 25-54% charge.
- Three green lights indicate that the battery has 55-79% charge.
- Four green lights indicate that the battery has 80-100% charge.

6. Unplug charger AC cord from the wall outlet.



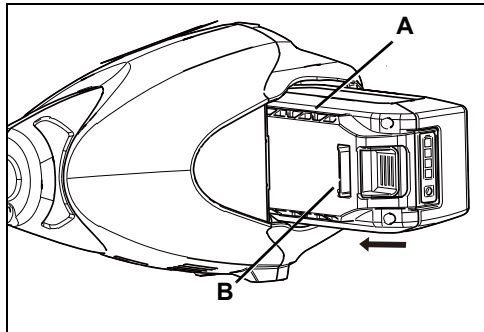
Battery Installation

WARNING

Attachment will operate when battery is installed, power indicator LED is lit, and operator presence switch, lock off lever switch (if applicable), and power switch are engaged. Make sure unit is properly positioned to prevent loss of control and possible serious injury. Keep movable parts of the attachment off the ground and away from objects that could become entangled or thrown.

Note: The battery comes partially charged from the factory and needs to be fully charged before first use.

1. Ensure power to unit is turned off.
2. Align ridges (A) on battery with grooves in power head. Slide battery into power head.
3. Ensure the battery latch (B) snaps into place and battery is secure before beginning operation.

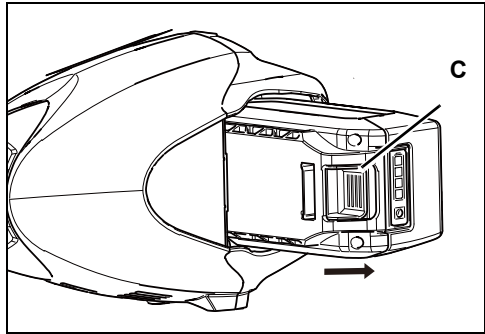


NOTICE

Ensure battery latch is fully engaged before using unit.

Battery Removal

To remove battery, push battery latch release (C) slide battery out of power head.

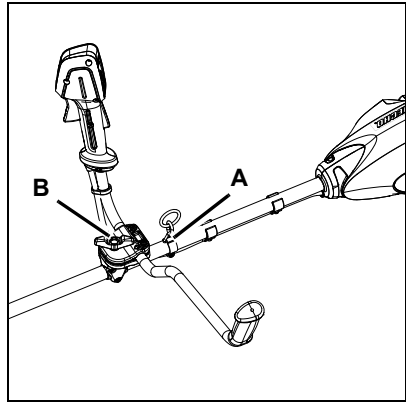


Balance and Adjust Unit - U Model

WARNING

- Do not wear more than one harness while operating unit.
- Do not wear any other safety device that can interfere with release or removal of the harness.

1. Loosen harness clamp screw.
2. Put on harness and attach unit to harness.
3. Slide harness clamp (A) up or down until unit balances with head approximately 50-75 mm (2-3 in.) from the ground.
4. Tighten harness clamp screw.
5. Loosen U-Handle clamp screws (B), and position U-Handle for comfortable operation.
6. Tighten U-Handle clamp screws securely.



OPERATION

Operation with Blades

WARNING

Metal blades are very sharp and can cause severe injuries, even if unit is off and blades are not moving. Avoid contact with blades. Wear gloves to protect hands.

WARNING

Blade use demands specific brushcutter configuration. Operation without specified shield, barrier bar or U-handle, and harness can result in serious personal injury. Follow installation instructions.

MATERIAL TO BE CUT		GRASS	WEED/ GRASS	WEED/ GRASS	BRUSH <12.7 MM (0.5 in.)	CLEARING <63.5 MM (2.5 in.)
Cutting Attachment		Nylon line head	Maxi-Cut head / Pro Maxi-Cut Head	3-tooth blade / 8-tooth blade	80-tooth blade	22-tooth blade
You must install these parts	Shield	Standard debris shield included with SRM, DSRM, T, PAS and DPAS trimmer attachments, or GT models (PRO Maxi-Cut Head is not rated for GT models)		Brushcutter shield supplied with U and C model brushcutters, blade conversion kit or PAS and DPAS brushcutter attachments		
	Handle	Standard handle included with SRM, DSRM, T, PAS and DPAS or GT models (PRO Maxi-Cut Head is not rated for GT models)		U-Handle* or support handle with barrier bar supplied with U and C model brushcutters, blade conversion kit or PAS and DPAS brushcutter attachments		
	Harness	Not required**		Harness*** supplied with U and C model brushcutters and blade conversion kit		
	Upper/lower plate adapter and washer	Not required	Washer required, included with cutting attachment	Upper/lower blade plate adapter included with U and C model brushcutters, blade conversion kit or PAS and DPAS brushcutter attachments		

MATERIAL TO BE CUT		GRASS	WEED/ GRASS	WEED/ GRASS	BRUSH <12.7 MM (0.5 in.)	CLEARING <63.5 MM (2.5 in.)
You must install these parts	Hex nut	Not required	Hex nut required, included with cutting attachment	Hex nut required, included with U and C model brushcutters, blade conversion kit or PAS and DPAS brushcutter attachments		
	Cotter pin	Not required	New cotter pin included with cutting attachment	New cotter pin included with U and C model brushcutters, blade conversion kit or PAS and DPAS brushcutter attachments		

*UL standards require brushcutters be equipped with a support handle with barrier bar or restrictive harness.

** Grass trimmers do not require a harness if dry weight is below 7.0 kg (15.4 lb). For grass trimmers having a dry weight of 7.0 kg (15.4 lb) to 8.5 kg (18.7 lb), a single-shoulder harness is required. A harness may be used as outlined in this Operator's Manual.

*** Brushcutters require a single shoulder harness, at a minimum, if the dry weight is below 8.5 kg (18.7 lb).

WARNING

Do not install blades on GT (curved shaft) model trimmers.

- Use only ECHO approved parts. Failure to use the correct parts can cause the blade to fly off. Serious injury to the operator and/or bystanders can occur.
- Arbor diameter of upper blade plate must match arbor diameter of blades.
- For barrier bar or U-handle, follow instructions supplied with either blade conversion kit or U-handle kit, and verify blade is secured properly.
- A new cotter pin is required each time a blade is installed.
- Shoulder harnesses may be used on all trimmers and brushcutters to reduce operator fatigue. Brushcutters over 8.5 kg (18.7 lb.) and U-handle brushcutters require a double shoulder harness.

Note: The barrier bar is used to restrict rearward movement of the unit. The barrier bar is not a handle and should not be gripped when using or carrying the unit.

Blade Selection

WARNING

An improper or dull blade can cause serious personal injury. The type of blade used must be matched to the type and size of material cut. Blades must be sharp. Dull blades increase the chance of kick-out and injury to yourself and bystanders. Never use an edging blade, circular saw blade, or any other type of unapproved blade.

NOTICE

Not all blades are compatible with all trimmers. Visit www.echo-usa.com or www.shindaiwa-usa.com to find compatible blades.

3-Tooth Grass/Weed Blade may be used wherever the nylon line head is used. DO NOT use this blade for heavy weeds or brush.

8-Tooth Weed/Grass Blade is designed for grass, garden debris and thick weeds up to 19 mm (0.75 in.) diameter. Do not use this blade for brush or heavy woody growth.

80-Tooth Brush Blade is designed for cutting brush and woody growth up to 13 mm (0.5 in.) diameter.

22-Tooth Clearing Blade is designed for dense thickets and saplings up to 64 mm (2.5 in.) diameter.

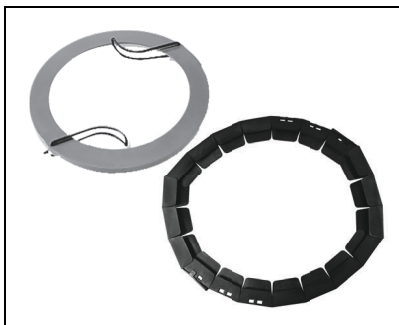
WARNING

A trimmer/brushcutter with a metal blade can cause serious injuries if handled improperly.

Use care when carrying or handling the equipment to avoid contact with the cutting edges of the blade. Use the optional blade cover when unit is not in use.

Keep blades in protective packaging until ready to install. Store blades safely after removal to prevent injury from accidental contact.

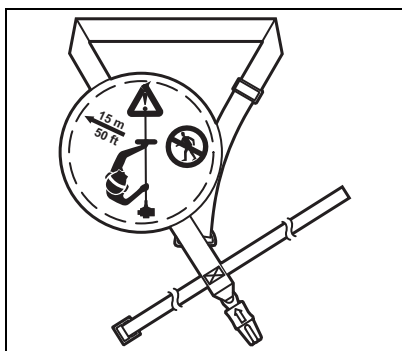
Use blade protectors to protect blade teeth during unit transportation.



Use Shoulder/Waist Harness

ECHO recommends using a shoulder/waist harness for all trimmer / brushcutter use, not just blade operation. The harness suspends the trimmer from the operator's shoulder and reduces operator fatigue.

The harness also increases operator safety by reducing the possibility of blade contact with the operator's hands and feet by restricting trimmer movement.



Ensure sure the warning sign on the back of the shoulder harness can be read easily.

Note: In case of emergency, disconnect the trimmer from the harness.

Starting Unit

WARNING

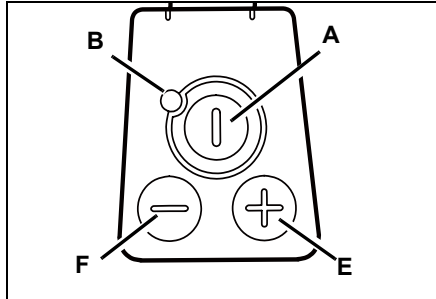
The attachment will operate when the battery is installed, the power indicator LED is lit, and the operator presence switch, lock off lever switch (if applicable), and power switch are engaged. Make sure the product is properly positioned to prevent loss of control and possible serious injury.

Note: This model has three operating modes: low, medium, high. Use + (E) and - (F) buttons to switch between modes. Power indicator LED flashes twice when highest or lowest setting is achieved by pushing + (E) and - (F) buttons. Use power switch to increase RPM speed within each mode.

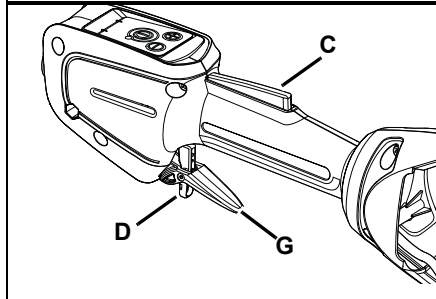
WARNING

Keep movable parts of the attachment away from objects that could become entangled or thrown, and surfaces that could cause loss of control.

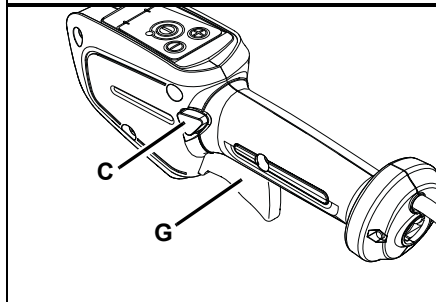
1. Push enable button (A) once to turn on power to unit. Power indicator LED (B) illuminates when power to unit is turned on.



2. Standard Unit Only:
Hold down operator presence switch (C). Move lock off lever switch (D) backward to free power switch (G), and then depress power switch to increase RPM.



3. U-Handle Unit Only:
Push operator presence switch (C). Depress power switch (G) to increase RPM. Release operator presence switch.



When power to unit is turned on:

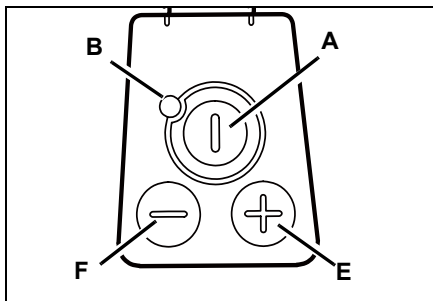
- After 90 seconds of inactivity, unit will power itself off.
- If power indicator LED remains lit, operation is normal.
- If power indicator LED flashes once per second, the battery needs to be charged.
- If power indicator LED flashes four times per second, there is a fault within the product. Turn power off to unit. Remove battery. Clear debris from around line head. Install battery. Turn power on to unit. If flashing continues, have your authorized servicing dealer repair the product.

Stopping Unit

WARNING

The cutting attachment continues to run for a short period after the unit is switched off. Avoid contact with moving cutting attachment or serious personal injury can result.

1. Release power switch and allow trimmer head to stop.
 2. Push enable button (A) to turn off power to unit.
- Power indicator LED (B) turns off when power to unit is turned off.
 - If the trimmer head does not stop when power switch and operator presence switch are released, push enable button to turn off and remove the battery to stop the power supply to product. Have your authorized servicing dealer repair unit before using product again.



Applications

WARNING

Incorrect unit positioning can cause loss of control and serious personal injury. Always hold throttle handle with right hand and support handle with left hand, positioning unit on right side of body.

WARNING

Do not install blades on GT (Curved Shaft) or T model trimmers.

Operating Techniques - Nylon Line Head

Nylon line heads may be used for trimming, scything, edging, and scalping of grass and light weeds.

Models with Speed-Feed[®] line heads: To advance trimmer line, tap trimmer head against the ground while the head is turning at normal operating speed.

Trimming

Feed the spinning line into the material to be cut. Tilt the line head to one side to direct cutting debris away from you:

- **Model SRM/PAS/SB/TX/C/T (Straight shaft, counterclockwise line head rotation):** Tilt the cutting head down on the right side (muffler side) while cutting to direct cutting debris away from operator. Feed the line gradually into the material you wish to cut, avoiding contact with fences or other barriers.
- **GT models:** Tilt cutting head to the left while cutting to direct debris away from the operator.

Scything

Scything - Swing the cutting head in a level arc, gradually feeding the line into the material being cut. Move forward with each arc to cut a swath. Width of cutting swath depends on arc. Use a larger arc for a wider swath, or a smaller arc for a narrow swath. Keep line head tilted to direct cutting debris forward or away from you.

Edging and Scalping

Both of these are done with the nylon line cutting head tilted at a steep angle. Scalping is removing top growth, leaving the earth bare. Edging is trimming the grass back where it has spread over a pavement or driveway. During both edging and scalping, hold the unit at a steep angle in a position where the debris, and any dislodged dirt and stone, will not come back towards you even if it ricochets off the hard surface.

General

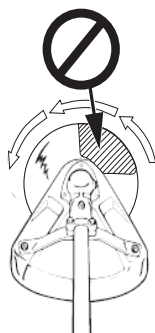
- Debris flows in direction of line head rotation. Change line head position to ensure debris flow is directed away from operator.
- Keep cutting line away from wire fences to avoid entanglement.
- Operate trimmer only with cutting head below knee height.

Operating Techniques - Metal or Plastic Blade

Brushcutter blades may be used to cut and trim a wide variety of materials, refer to the blade selection section for determining the correct blade for the application.

Scything (3-, 8-, and 80-tooth weed/grass, and brush blades)

- To cut large sections of field grass and weeds swing the cutting head in a level arc, gradually feeding the blade into the material being cut. Adjust throttle speed according to the work.
- Do not swing the main pipe with arms. Turn hips to swing the blade horizontally from right to left, and cut weeds on the left side of the blade.
- Do not scythe back and forth as the grass may scatter and kickback may occur easily.
- Tilt blade left by 5 to 10 degrees so that cut grasses will push left, making progress easier.
- Move forward with each arc to cut a swath.
- Width of cutting swath depends on arc. Use a larger arc for a wider swath, or a smaller arc for a narrow swath. Suggested cutting width is about 1.5 m (4.9 ft).
- When scything large brush up to 12.7 mm (0.5 in.) diameter from right to left, avoid cutting with highlighted section.



Reaction Forces

WARNING

- The cutting attachment will continue to rotate even after the throttle is released, maintain control of the unit until it has come to a complete stop.
- Blade thrust may occur when the spinning blade contacts an object that it does not immediately cut. Following proper cutting techniques will prevent blade thrust.
- Blade thrust can be violent enough to cause the unit and/or operator to be propelled in any direction, and possibly lose control of the unit.
- Blade thrust can occur without warning if the blade snags, stalls or binds.
- Blade thrust is more likely to occur in areas where it is difficult to see the material being cut.

Push or Pull - Kickout

During normal use, operating a brushcutter with a circular metal blade can produce sudden strong reaction forces that are difficult to control. Strong reaction forces can cause a loss of balance or loss of control of the equipment, resulting in serious injury to operator and bystanders.

Understanding what causes these reactive forces may help you to avoid them, and can help you to maintain control of the equipment if you experience a sudden reaction during cutting. Reactive forces occur when the force being applied by the cutting teeth of a blade meet resistance, and some of the cutting force is directed back toward the equipment. The greater the cutting force or the amount of resistance, the greater the reactive force.

Push and Pull Forces

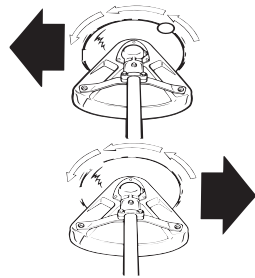
Push and pull forces are reactive forces that push the equipment directly toward the operator, or that pull the equipment directly away from the operator. These forces are the result of cutting on the sides of the blade. The direction of the force depends on the side of the blade being used, and the direction of blade rotation at the point of contact. The reactive force is in the opposite direction of blade rotation at the contact point, regardless of where the contact is being made. These types of reactive forces are also called "blade thrust." As shown in the illustration, a blade turning counterclockwise will cause the equipment to pull away from the operator if the point of cutting resistance is on the left side of the blade. If the point of cutting resistance is on the right side of the blade, the equipment will push back toward the operator. In both examples, the reactive force is in the opposite direction of blade rotation at the contact point where resistance occurs.



Kickout

Kickout is also a reactive force caused by resistance to cutting, but the direction of blade thrust is lateral (to the left or right of the blade), instead of forward or back toward the operator. In most cases, push, pull, and kickout can be reduced or eliminated by:

- Using the correct blade for the cutting job.
- Using properly sharpened blades.
- Applying consistent, even force to the blade during the cut.
- Avoiding obstacles and ground hazards.
- Using extra care when cutting harder materials such as extremely dry brush, saplings, and small trees.
- Cutting from a stable, secure position.



Blade Cutting Problems

Binding - Blades may bind in the cut if dull or forced. Binding can damage blade, and result in blade breakage or injury from fragments and flying debris. If a blade binds in a cut, do not try to get it out by applying up and down force to pry the cut open. Applying prying force to the blade can bend the blade, and result in blade failure and injury.

To free a blade that is bound in the cut, stop the engine, and support the trimmer or brushcutter to keep stress off the blade. Push the tree away from the entry point of the cut to open the cut, and pull the blade directly away from the cut in a straight-line motion. Use caution when releasing the tree to avoid being struck by spring-back or falling.



Inspect the blade for damage before proceeding. Sharpen teeth if dull, or replace blade if cracked, bent, missing teeth, or otherwise damaged.

To prevent binding:

- Keep blades sharp.
- Avoid excessive pressure during cuts.
- Do not exceed cutting capacity of blade.
- Do not use blades with damaged or missing cutting teeth.
- Do not tilt blade when cutting.

MAINTENANCE

 **WARNING**

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop unit and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit. Allow unit to cool before performing service. Wear gloves to protect hands from sharp edges and hot surfaces.

 **WARNING**

Operating a poorly maintained unit can result in serious injuries to operator or bystanders. Always follow all maintenance instructions as written, otherwise serious personal injury can result.

Your unit is designed to provide many hours of trouble-free service. Regular scheduled maintenance will help your unit achieve that goal. If you are unsure or are not equipped with the necessary tools, we recommend that you take your unit to a Servicing Dealer for maintenance. To help you decide whether you want to DO-IT-YOURSELF or have the Dealer do it, each maintenance task has been graded. If the task is not listed, see your Dealer for repairs.

 **WARNING**

Unit can operate when batteries are installed. Unexpected operation can cause serious personal injury. Always remove batteries before performing maintenance procedures.

NOTICE

Do not let brake fluids, gasoline, petroleum-based materials touch the plastic parts. Chemicals can cause damage to the plastic, and make the plastic unserviceable.

NOTICE

Do not use strong solvents or detergents on the plastic housing or components.

Skill Levels

Level 1 = Easy to do. Common tools may be required.

Level 2 = Moderate difficulty. Some specialized tools may be required.

Level 3 = See your dealer.

Click [HERE](#) or go to <http://www.echo-usa.com/products/maintenance-kit>

Maintenance Intervals

COMPONENT OR SYSTEM	MAINTENANCE PROCEDURE	SKILL LEVEL
Daily Or Before Use		
Battery / Battery Compartment	Inspect / Clean / Charge	1
Cut Off Knife	Inspect / Clean	1
Screws / Nuts / Bolts	Inspect / Tighten / Replace	1
Drive Shaft	Grease ¹	2
Gear Housing	Grease ²	2

¹Apply lithium-based grease every 25 hours of use.

² Apply lithium based grease every 50 hours of use.

NOTICE

If not maintained properly, the product's performance may deteriorate. Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance.

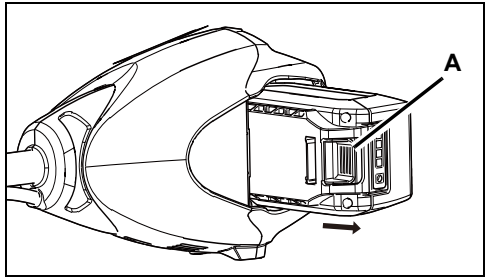
Maintenance and Care

Cleaning Battery and Battery Compartment

WARNING

Risk of electric shock or fire. Do not use conducting materials to clean battery or battery compartment. Otherwise serious personal injury may result.

1. Release power switch and operator presence switch, and allow unit to stop.
2. Verify power indicator LED is not illuminated.
3. Push battery latch release (A) and slide battery out of power head.
4. Use compressed air or a soft bristle brush to remove debris from battery and battery compartment.



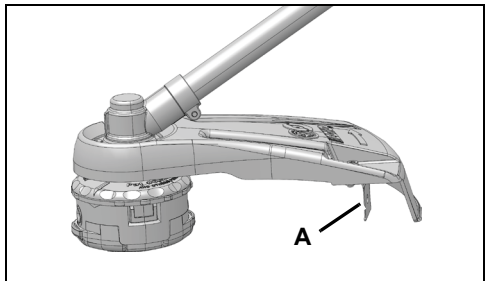
Cut-off Knife

CAUTION

Wear gloves or personal injury may result:

- **Cut-off knife is sharp.**
- **Gearcase and surrounding area may be hot.**

1. Inspect cut-off knife (A) for damage or wear. Ensure that it is properly attached to debris shield.
2. Remove any blockages from cutting accessory with screwdriver or similar tool.



Lubrication

Level 1.

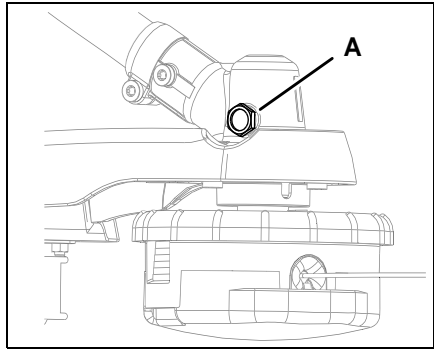
Parts Required: Lithium-based grease

Gear Case

NOTICE

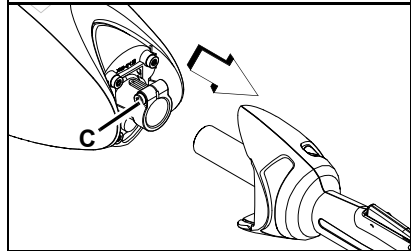
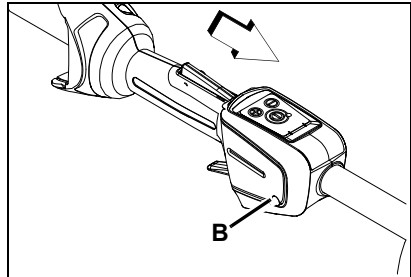
Gear cases without grease plug (A) do not require lubrication.

1. Clean all loose debris from gear case.
2. Remove plug (A) and check level of grease.
3. Add grease if necessary. DO NOT over-fill.



Flex Cable

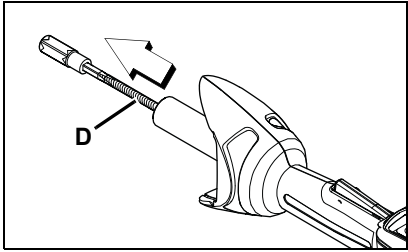
1. Loosen handle clamping screw (B) and slide throttle handle forward.
2. Loosen clamping screw (C) and slide shaft out of power head.



NOTICE

Do not get dirt on flex cable.

3. Pull flex cable (D) out of shaft housing, wipe clean and re-coat with 15 ml (0.5 oz.) grease.
4. Slide flex cable (D) back into shaft housing.
5. Assemble in reverse order.



Nylon Line Replacement

! CAUTION

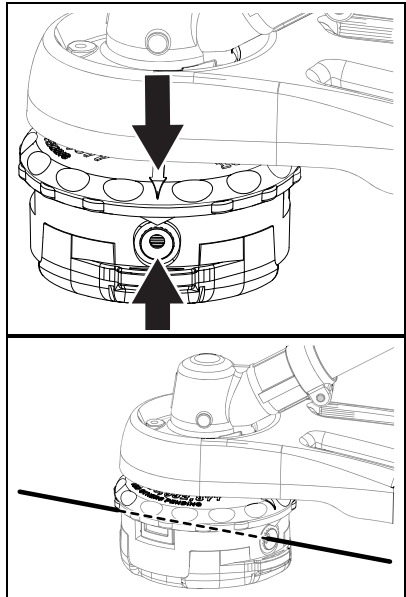
Wear gloves or personal injury may result:

- *Cut-off knife is sharp.*
- *Gear case and surrounding area may be hot.*

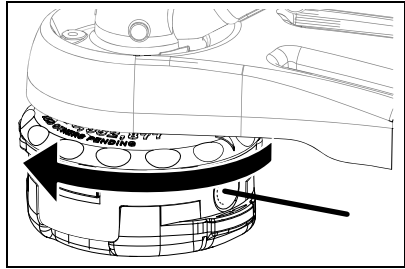
! WARNING

Never use wire or wire-rope that can break off and become a dangerous projectile. Serious injury can occur.

1. Cut one piece of line to 6 m (20 ft.) length. Use 2.4 mm (0.095 in.) or 2.0 mm (0.080 in.) diameter.
2. Align arrows on top of knob with openings in eyelets.
3. Insert one end of trimmer line into an eyelet, and push line equal distance through trimmer head.

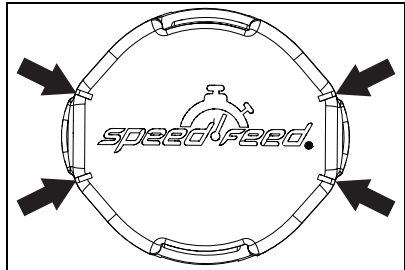


4. Hold trimmer head while turning knob clockwise to wind line onto spool until about 130 mm (5 in.) of each line remains exposed.



NOTICE

When the wear indicators located at the bottom of the Speed-Feed® head are worn smooth, or if holes appear, replacement of the cover or the entire Speed-Feed® head required.



Sharpening Metal Blades

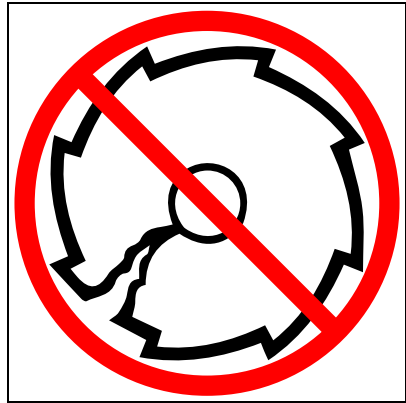
WARNING

Metal blades are very sharp and can cause severe injuries, even if unit is off and blades are not moving. Avoid contact with blades. Wear gloves to protect hands.

Several styles of metal blades are approved for use on the brushcutter. The 8-tooth blade can be sharpened during normal maintenance. The clearing blade and 80-tooth blade require professional service.

Before sharpening, closely inspect blade for cracks (look at the bottom of each tooth and the center mounting hole closely), missing teeth and bending. If any of these problems are discovered, replace the blade.

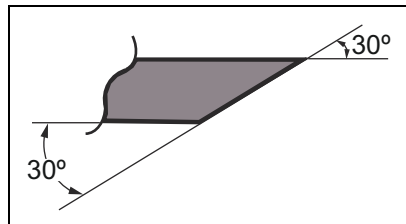
When sharpening a blade, always remove the same amount of materials from each tooth to maintain balance. A blade that is not balanced will cause unsafe handling due to vibration and can result in blade failure.



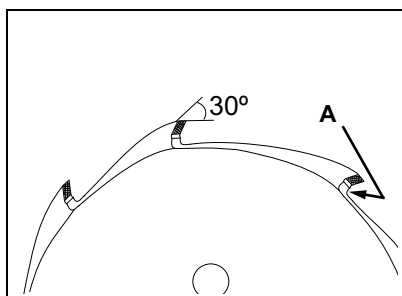
NOTICE

If an electric grinder is used, use care not to overheat teeth, do not allow tips/tooth to glow red or turn blue. Do not place blade in cooling water. This will change the temper of the blade and could result in blade failure.

1. File each tooth at a 30 degree angle a specific number of times, e.g., four strokes per tooth. Work your way around the blade until all teeth are sharp.



- Do not file the gullet (radius) (A) of the tooth with the flat file. The radius must remain. A sharp corner will lead to a crack and blade failure.
- After sharpening teeth, check each tooth radius for evidence of a square (sharp) corner. Use the round (rat tail) file to renew the radius.



TROUBLESHOOTING

Trouble	Cause	Solution
Red charger LED flashes or does not light up	Plug not connected to power outlet	Plug in the charger
	Battery not installed properly	Check the battery installation
	Obstructed connection	Reinstall battery again after remove obstructions from connection
	Fault in the charger	Consult your dealer
	Fault in the battery	Consult your dealer
Unit will not turn on	Battery not installed properly	Check the battery installation
Unit does not run when turned on	Battery discharged	Charge the battery
	Battery outside acceptable temperature range	Remove the battery and allow to cool

Trouble	Cause	Solution
Running time is too short	Battery outside acceptable temperature range	Remove the battery and allow to cool
	Unit electronics too hot	Turn unit off and allow to cool
	Battery discharged	Charge the battery
Line will not feed	Not enough line on the spool	Refill with new line
	Line tangled in the spool	Untangle and refill line
Line fails to cut off	Cut-off knife is damaged or missing	Consult your dealer

Checking and maintenance requires specialist knowledge. If you are unable to check and maintain the product or deal with a fault yourself, consult your dealer. Do not attempt to dismantle the product. Consult your dealer in the event of a problem that is not covered in the table above, or other such concerns. For spare parts and consumables, please use only genuine parts and designated products and components. Using parts from other manufacturers or non-designated components may result in a malfunction.

STORAGE

Storage

WARNING

Do not store in an enclosure where combustible fumes may accumulate. Fire may result.

When storing the product for long periods of time, ensure that the following preparations for storage are carried out.

Unit

Do not store your unit without performing protective storage maintenance which includes the following:

1. Turn unit power off.
2. Remove battery.
3. Remove accumulation of dirt and debris from exterior of unit.
4. Tighten all screws and nuts.
5. Cover battery compartment, battery, and charger.
6. Store unit in a dry, dust-free place out of the reach of children.

Battery

1. Remove battery.
2. Store in a dry, dust-free place, out of the reach of children.
3. Store in temperatures consistent with recommendations in ambient temperature chart. See Temperature Information.
4. Charge battery according to recommendations in ambient temperature chart. See Temperature Information.

Charger

1. Remove battery from charger.
2. Disconnect charger from power supply.
3. Store in a dry, dust-free place, out of the reach of children.

Disposal

Major plastic parts making up the product have codes showing their materials. The codes refer to the following materials; dispose of those plastic parts in accordance with local regulations.



Materials

Mark	Material
>PA6-GF<	Nylon 6 - Glass fiber
>PP-GF<	Polypropylene - Glass fiber

Materials

Mark	Material
>PE-HD<	Polyethylene
>PP<	Polypropylene

- Battery contains lithium. Dispose of only at a designated collection point.
- Lithium-ion batteries must be disposed of properly.
- Please contact your dealer in case you do not know how to dispose of or recycle waste plastic parts.

WARRANTY

WARRANTY

Limited Warranty Statement for ECHO 56 Volt Handheld Products and Walk Behind Mowers sold in USA and Canada

ECHO Incorporated warrants to the original retail purchaser that this ECHO brand 56 Volt outdoor product is free from defects in material and workmanship and agrees to repair or replace, at ECHO Incorporated's discretion, any defective product free of charge within these time periods from the date of purchase:

- If the product is for homeowner use:
 - Units and Bare Tool – 5 Years
 - Battery or charger – 2 years
- If the product is for commercial use:
 - Units and Bare Tool – 2 years
 - Battery or charger – 2 years
- If the product is for rental use: 90 days for all units, batteries, and chargers.
- Cutting attachments such as, but not limited to, bars, chains, sprockets, blades, tines, belts, PowerBroom™ and nylon trimmer heads for homeowner or non-income producing use will be covered for failures due to defects in material or workmanship for a period of 60 days from original product purchase date and 30 days for commercial / rental use. Any misuse from contact with concrete, rocks, or other structures is not covered by this warranty.

This warranty extends to the original retail purchaser only and commences on the date of the original retail purchase.

Any part of this product found in the reasonable judgment of ECHO Incorporated, to be defective in material or workmanship will be repaired or replaced without charge for parts and labor by an authorized ECHO dealer. Units, repair parts and accessories replaced under this warranty are warranted only for the balance of the original warranty period.

The product, including any defective part, must be returned to an authorized ECHO dealer within the warranty period. The expense of delivering the product to the service center for warranty work and the expense of returning it back to the owner after repair or replacement will be paid by the owner. ECHO Incorporated's, responsibility in respect to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any ECHO brand 56 Volt outdoor product. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an authorized ECHO dealer.

This warranty does not cover any units, battery or charger that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual. This warranty does not cover normal deterioration due to the use or exposure, and any repairs made necessary by normal wear, improper maintenance, improper lubrication, improper storage, dirt, abrasives, impact, moisture, water, rain, snow, rust, corrosion, varnish, or other similar conditions.

This warranty does not cover damage to chargers or batteries by improper charging voltage and batteries that have been exposed to temperatures beyond those specified in the Operator's Manual, batteries that have not been properly charged or batteries that have reached their useful life.

This warranty does not apply to any damage to the product that is the result of improper maintenance or to any product that has been altered or modified. The warranty does not extend to repairs made necessary by normal wear or by the use of parts or accessories which are either incompatible with the ECHO brand 56 Volt outdoor product or adversely affect its operation, performance, or durability. In addition, this warranty does not cover wear to normal items such as, but not limited to:

Wear items – Bump Knobs, Outer Spools, Cutting Lines, Inner Reels, Felt Washers, Hitch Pins, Mulching Blades, Blower Fans, Blower and Vacuum Tubes, Vacuum Bag and Straps, Guide Bars, Saw Chains, Grass Catch Bag, Hedge Trimmer Blades, and Wheels

ECHO Incorporated, reserves the right to change or improve the design of this product without assuming any obligation to modify any product previously manufactured.

All implied warranties are limited in duration to the stated warranty period. Accordingly, any such implied warranties including merchantability, fitness for a particular purpose, or otherwise, are disclaimed in their entirety after the expiration of the appropriate five-year, two-year, one-year, 90-day, 60-day, or 30-day warranty period. ECHO Incorporated's obligation under this warranty is strictly and exclusively limited to the repair or replacement of defective parts. ECHO Incorporated, does not assume or authorize anyone to assume for them any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. ECHO Incorporated, assumes no responsibility for incidental, consequential, or other damages including, but not limited to, expense of returning the product to an authorized dealer for ECHO brand 56 Volt outdoor products and expense of delivering it back to the owner, mechanic's travel time, telephone charges, rental of a like product during the time warranty service is being performed, travel, loss or damage to personal property, loss of revenue, loss of use of the product, loss of time, or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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

This warranty applies to all ECHO brand 56 Volt outdoor products manufactured by or for ECHO Incorporated, and sold in the United States and Canada.

To locate your nearest authorized ECHO dealer, visit www.ECHO-usa.com or dial 1-800-432-ECHO (3246).

99922205724
11/2022

PRODUCT REGISTRATION

Thank you for choosing ECHO Power Equipment

Please go to <http://www.echo-usa.com/Warranty/Register-Your-ECHO> to register your new product on-line. It's **FAST** and **EASY!**

NOTE: Your information will never be sold or misused by ECHO Incorporated. Registering your purchase enables us to contact you in the unlikely event of a service update or product recall, and verifies your ownership for warranty consideration.

If you do not have access to the Internet, you can complete the form below and mail to:

***ECHO Incorporated, Product Registration, PO Box 1139,
Lake Zurich, IL 60047.***



PRODUCT REGISTRATION CARD : TARJETA DE REGISTRO : CARTE D'ENREGISTREMENT DU PRODUIT

ONLINE OPTION: Register online and save a stamp! You will be alerted of product updates and/or be sent new ECHO product information and special offers. Simply go to: www.echo-usa.com

OPCIÓN POR INTERNET: Regístrese en la página web y ahorre una estampilla! Le alertarán sobre actualizaciones del producto y/o se le enviará información sobre los nuevos productos ECHO y ofertas especiales. Simplemente visite: www.echo-usa.com

OPTION EN LIGNE: Enregistrer en ligne et épargner un timbre! Vous serez informé sur les nouveaux produits ECHO et les mises à jour de produit ainsi que les offres spéciales. Simplement visitez le: www.echo-usa.com

Please Print : Por Favor Enscriba Con Letra De Molde : En Lettre Carré S.V.P.

Confidential: Information provided will not be shared or sold

Purchaser's Name : Nombre del Comprador : Nom de l'acheteur	
Address : Dirección : Adresse	
City : Ciudad : Ville	Zip Code - Código Postal : Code Postal
State : Estado : Province	
E-Mail Address : Dirección De Correo Electrónico : Courriel Électronique	
Phone Number : Número De Teléfono : Téléphone	Date of Purchase : Fecha de la Compra : Date de l'achat
Where Purchased : Nombre del Almacén donde fue Comprado : Lieu d'achat	
Model Number : Numero del Modelo : No. de modèle	Serial Number : Numero de Serie : No. de série

Registering your purchase enables us to contact you in the unlikely event of a service update or product recall and verifies your purchase. We will not share your information with third parties without your consent. Please do not provide this information as a condition of sale or as a requirement for purchase. The registration of your purchase will be verified and confirmed in the event of a recall or product update. L'enregistrement de votre achat nous permettra de vous contacter dans le cas improbable de modifications des instructions d'emballage ou de rappel du produit et vérifier que vous êtes le propriétaire en cas de vol ou de perte.

Primary use of tool: Professional Homeowner Rental Equip.
 Uso primario de la herramienta: Profesional Dueño de casa Alquiler
 Usage principal: Professionnel Résidentiel Location
 Do you wish to receive periodic ECHO product information and special offers by e-mail? Yes No

¿Desea usted recibir información periódica y ofertas especiales por correo electrónico sobre el producto ECHO? Yes No

Souhaitez-vous recevoir périodiquement de l'information sur les produits ECHO et les offres spéciales par courrier électronique? Oui Non

Did you visit the ECHO website before purchasing your product? Yes No
 Visité usted la página web ECHO antes de comprar su producto? Si No

Avez-vous visité le site d'ECHO avant de procurer votre produit? Oui Non

What factor(s) most influenced your purchase?

- Performance
- Price
- Dealer
- Reliability
- Prior Experience
- Quality
- Friend/Family
- Brand
- Warranty

¿Que factor(es) influenció más en su compra?
 Funcionamiento Precio Distribuidor
 Confiabilidad Experiencia Anterior Calidad
 Amigo/Familia Marca Garantía

Quel facteur (facteurs) vous a influencé le plus?
 Performance Prix Marchand
 Fiabilité Expérience Qualité
 Ami/Famille Marque Garantie

ECHO INC., 400 Oakwood Rd., Lake Zurich, IL 60047
 1.800.432.ECHO WWW.ECHO-USA.COM

X757270206 02-2012



U56200001001 - U56200999999
U56500001001 - U56500999999



ECHO INCORPORATED

400 Oakwood Road
Lake Zurich, IL 60047

www.echo-usa.com